3361

MAY 1956
LIBRARY
POFI
FISH & WILDLIFE
SERVICE

PROCEEDINGS OF THE UNITED STATES NATIONAL MUSEUM

issued by the

SMITHSONIAN INSTITUTION
U. S. NATIONAL MUSEUM

Vol. 105 Washington : 1956 No. 3361

MARINE POLYCHAETE WORMS FROM LABRADOR

By Marian H. Pettibone[1]

This report on the polychaete fauna of Labrador is based on material collected by the *Blue Dolphin* Expeditions to Labrador and Newfoundland in 1949, 1950, 1951, and 1952 under the command of David C. Nutt. The collections were made between 51° and 60° north latitude, in the intertidal zone and in depths of from 4 to 125 fathoms, on bottoms of silt, mud, sand, rubble, pebbles, stones, and rocks, together with detritus, shells, corals, bryozoans, algae, worm tubes, and various combinations of these. The collections are deposited in the U. S. National Museum. Additional records for some of the Labrador species are cited from other collections in that museum.

This paper supplements to some extent the report on the polychaetes of Point Barrow, Alaska (Pettibone, 1954). Of the 68 species in the Labrador collections, 45 were found at Point Barrow. In the systematic portion below, only those literature references not mentioned in the earlier paper are cited; more complete synonymies for the species common to both regions will be found in the Point Barrow report.

[1] Department of Zoology, University of New Hampshire, Durham, N. H.

366148—56——1

The polychaete fauna of Labrador is known only from a few scattered records. The most extensive single paper is the report by J. Percy Moore (1909b) on a collection of polychaetes dredged in 1908 by Owen Bryant off the coasts of Labrador, Newfoundland, and Nova Scotia; 38 of the 51 species mentioned in that report were found on the Labrador coast. Most of the collection was deposited in the National Museum and is referred to below. The *Blue Dolphin* collections nearly double the number of polychaete species known from Labrador.

The writer acknowledges her appreciation to the authorities of the Smithsonian Institution for allowing her to make use of the facilities of the National Museum, and especially to Dr. Waldo L. Schmitt and Dr. Fenner A. Chace, Jr., of the Department of Zoology staff there. Special thanks are also due to Mr. David C. Nutt of the Dartmouth College Museum for his helpful suggestions and assistance.

List of Stations

The locations of the polychaete stations are shown in figure 1. They are listed below with temperatures (estimated yearly range in parentheses) and salinities, all of which were furnished by D. C. Nutt. The species found at each station are listed, with the number of specimens indicated in parentheses.

1. Strait of Belle Isle, 51°26.5′ N., 56°52′ W., 40 fms., June 27, 1949; 0.8° C. (−1.5 to 3.0), 32°/₀₀.

   Harmothoë extenuata (Grube) (5)
   Eusyllis blomstrandi Malmgren (9)
   Nereis pelagica Linné (3)
   Spirorbis spirillum (Linné) (5)

2. Strait of Belle Isle, 51°41.5′ N., 56°20′ W., 25 fms., coral and rock, July 1, 1949; −0.43° C.? (−1.6 to 1.0), 32°/₀₀.

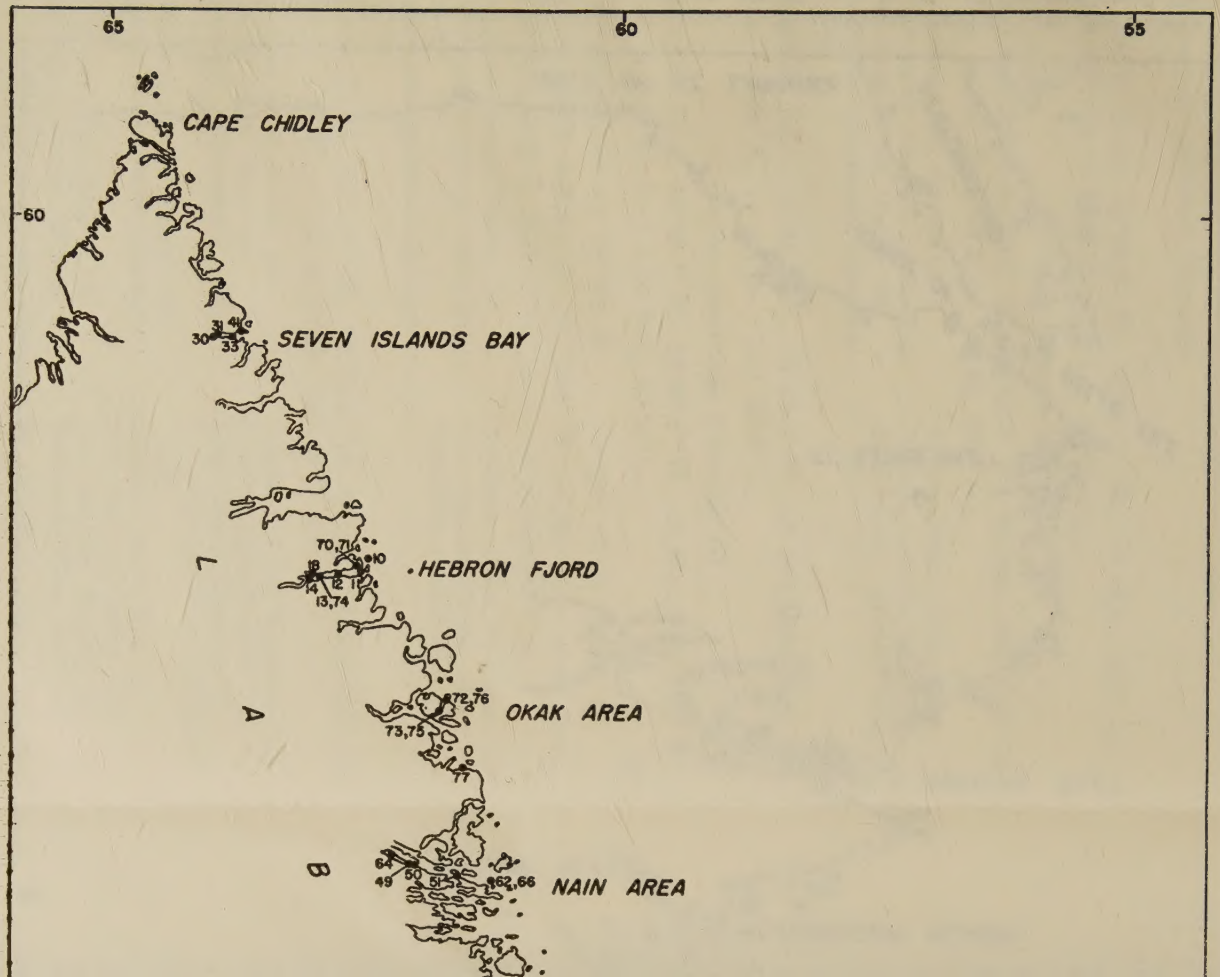
   Eunoë oerstedi Malmgren (1)
   Harmothoë imbricata (Linné) (1)
   Harmothoë extenuata (Grube) (5)
   Autolytus fallax Malmgren (1)
   Sphaerosyllis erinaceus Claparède (1)
   Eusyllis blomstrandi Malmgren (6)
   Nereis pelagica Linné (4)
   Nothria conchylega (Sars) (1)
   Thelepus cincinnatus (Fabricius) (1)

3. Strait of Belle Isle, 51°39.7′ N., 55°57.7′ W., 30 fms., rock, July 1, 1949; 0.0° C. (−1.0 to 12), 32°/₀₀.

   Thelepus cincinnatus (Fabricius) (1)

4. Strait of Belle Isle, 51°39.7′ N., 56°08′ W., 40 fms., rubble, July 1, 1949; −0.8° C. (−1.6 to 1.0?), 32.3°/₀₀.

   Eunoë nodosa (Sars) (2)
   Eunoë oerstedi Malmgren (1)
   Harmothoë extenuata (Grube) (1)


65
60
55
60
CAPE CHIDLEY
SEVEN ISLANDS BAY
HEBRON FJORD
OKAK AREA
NAIN AREA
LABRADOR

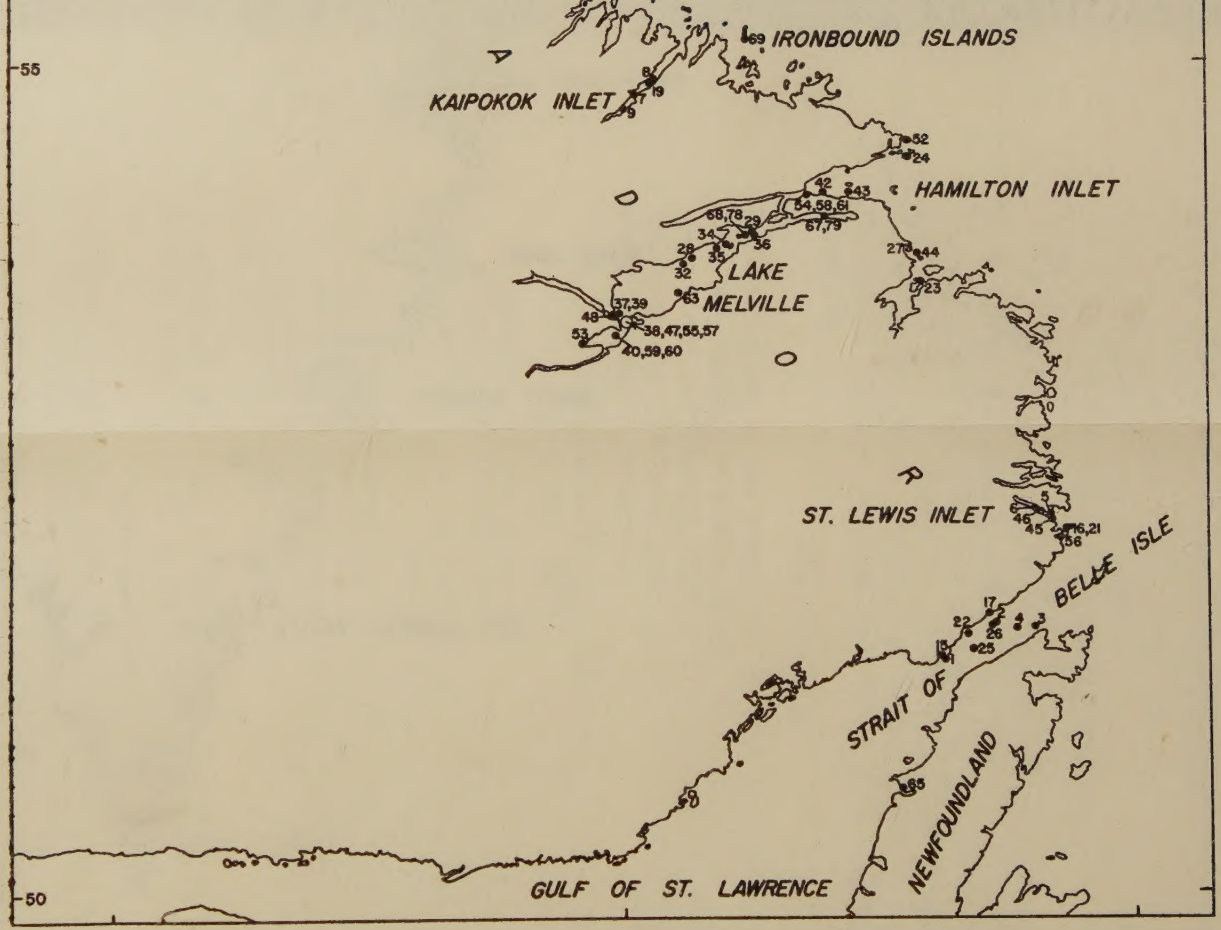


FIGURE 1.—Coasts of Labrador and Newfoundland showing the locations of the polychaete stations of the *Blue Dolphin* Labrador Expeditions of 1949 (Stations 1–27), 1950 (Stations 28–48), 1951 (Stations 49–66), and 1952 (Stations 67–79). (Prepared by D. C. Nutt.)

366148—56 (Face p. 532)

5. St. Lewis Inlet, 52°20.1′ N., 55°49.4′ W., 40 fms., mud, July 12, 1949; −1.2° C. (−1.6 to ?), 32.61‰.

Arcteobia anticostiensis (McIntosh) (1)
Prionospio malmgreni Claparède (1)
Pectinaria hyperborea (Malmgren) (8)

6. St. Lewis Inlet, 52°22.3′ N., 55°56.7′ W., 35 fms., soft mud, July 12, 1949; −1.34° C. (−1.6 to ?), 32.4‰.

Harmothoë extenuata (Grube) (1)

7. Kaipokok Inlet, 54°56.7′ N., 59°43.2′ W., 45 fms., silt, July 29, 1949; −1.8° C. (−1.8 to −1.6), 32.6‰.

Antinoë badia (Théel) (5)
Harmothoë extenuata (Grube) (4)
Gattyana cirrosa (Pallas) (2)
Castalia aphroditoides (Fabricius) (1)
Nephtys ciliata (Müller) (2)
Polycirrus medusa Grube (1)
Branchiomma infarcta (Kröyer) (5)

8. Kaipokok Inlet, 55°01.5′ N., 59°33.3′ W., 45 fms., silt, July 29, 1949; −1.85° C. (−1.8 to −1.6), 32.9‰.

Castalia aphroditoides (Fabricius) (1)

9. Kaipokok Inlet, 54°52.4′ N., 59°50.3′ W., 15 fms., silt, July 29, 1949; −1.1° C. (−1.8 to 0.0), 30.68‰.

Harmothoë extenuata (Grube) (1)
Gattyana cirrosa (Pallas) (2)

10. Hebron Fjord, 58°14.8′ N., 62°29.6′ W., 60 fms., fine sandy mud, some rock, Aug. 7, 1949; −1.0° C. (−1.8 to 0.0), 32.5‰.

Gattyana cirrosa (Pallas) (3)
Gattyana amondseni (Malmgren) (1)
Pectinaria hyperborea (Malmgren) (7)
Ampharete arctica Malmgren (1)
Pista flexuosa (Grube) (3)
Terebellides stroemii Sars (1)

11. Hebron Fjord, 58°11.4′ N., 62°34.2′ W., 95 fms., mud, Aug. 8, 1949; −1.8° C. (−1.8 to −1.8), 33‰.

Antinoë badia (Théel) (2)
Eunoë nodosa (Sars) (1)
Arcteobia anticostiensis (McIntosh) (6)
Gattyana cirrosa (Pallas) (36)
Gattyana amondseni (Malmgren) (1)
Nephtys ciliata (Müller) (2)
Cirratulus cirratus (Müller) (1)
Chaetozone setosa Malmgren (16)
Brada inhabilis (Rathke) (1)
Brada granosa Stimpson (13)
Pectinaria hyperborea (Malmgren) (186)
Sabellides borealis Sars (1)
Pista flexuosa (Grube) (15)
Pista maculata (Dalyell) (1)
Euchone papillosa (Sars) (4)

12. Hebron Fjord, 58°09′ N., 62°45.7′ W., 125 fms., mud, Aug. 8, 1949; −1.85° C. (−1.8 to −1.8), 33.1‰.

Gattyana cirrosa (Pallas) (16)
Chaetozone setosa Malmgren (30)
Nicomache lumbricalis (Fabricius) (3)
Pectinaria hyperborea (Malmgren) (62)
Sabellides borealis Sars (9)
Pista flexuosa (Grube) (4)
Pista maculata (Dalyell) '20)
Potamilla neglecta (Sars) (1)
Euchone papillosa (Sars) (10)

13. Hebron Fjord, 58°08.6′ N., 62°55.6′ W., 90 fms., mud, Aug. 11, 1949; −1.8° C. (−1.8 to −1.7), 33.12°/₀₀.

Pectinaria hyperborea (Malmgren) (5)

14. Hebron Fjord, 58°05.6′ N., 63°03.9′ W., 50 fms., mud, some rock, Aug. 12, 1949; −1.7° C. (−1.8 to −1.6), 32.55°/₀₀.

Harmothoë extenuata (Grube) (2)
Arcteobia anticostiensis (McIntosh) (1)
Gattyana cirrosa (Pallas) (2)
Nicomache lumbricalis (Fabricius) (1)
Pectinaria hyperborea (Malmgren) (10)
Pista maculata (Dalyell) (1)

15. Strait of Belle Isle, Forteau Bay, 51°28′ N., 56°54′ W., 15–20 fms., sand, June 26, 1949; 2° C. (−1.0 to 6.0), 31.33°/₀₀.

Travisia forbesii Johnston (2)
Ophelia limacina (Rathke) (2)

16. St. Lewis Inlet, Indian Island, Assizes Run, 52°15′ N., 55°04′ W., 8 fms., sand and rock, July 11, 1949; 4° C. (−1.6 to 6.0), 29°/₀₀.

Harmothoë extenuata (Grube) (4)
Nereis pelagica Linné (1)

17. Strait of Belle Isle, Red Bay, 51°44′ N., 56°25′ W., 8 fms., soft mud, June 30, 1949; 2° C. (−1.6 to 6.0), 31°/₀₀.

Nephtys ciliata (Müller) (4)
Pherusa plumosa (Müller) (4)
Praxillella praetermissa (Malmgren) (2)
Pectinaria hyperborea (Malmgren) (4)
Ampharete acutifrons Grube (1)
Lysippe labiata Malmgren (1)
Samytha sexcirrata (Sars) (3)
Terebellides stroemii Sars (2)
Chone dunéri Malmgren (2)

18. Hebron Fjord, Soak Point, 58°11′ N., 63°01′ W., 13 fms., rock, pebbles, sand, Aug. 31, 1949; 1.0° C. (−1.8 to 3.0), 31°/₀₀.

Gattyana cirrosa (Pallas) (2)
Nephtys ciliata (Müller) (4)
Lumbrineris fragilis (Müller) (3)
Pherusa plumosa (Müller) (1)

19. Kaipokok Fjord, 54°56′ N., 59°38′ W., 45 fms., silt, Aug. 1, 1949; −1.8° C. (−1.8 to −1.6), 32.9°/₀₀.

Melaenis lovéni Malmgren (1)

20. Davis Inlet, 55°51′ N., 60°48′ W., 12 fms., rubble, Aug. 3, 1949; 4.0° C. (−1.8 to 6.0), 30°/₀₀.

Harmothoë extenuata (Grube) (1)
Nephtys ciliata (Müller) (2)
Flabelligera affinis Sars (1)
Pectinaria granulata (Linné) (2)
Thelepus cincinnatus (Fabricius) (3)

21. St. Lewis Inlet, Assizes Harbor, 52°15′ N., 55°04′ W., 6 fms., muddy sand and coral, July 15, 1949; 4.5° C. (−1.6 to 6.0), 29°/₀₀.

Harmothoë extenuata (Grube) (1)

22. Strait of Belle Isle, 2 miles off Anse au Loup, 51°36′ N., 56°38′ W., 30–40 fms., June 29, 1949; −0.5° C. (−1.2 to 2.0), 32°/₀₀.

Harmothoë extenuata (Grube) (1)
Autolytus alexandri Malmgren (1)
Eusyllis blomstrandi Malmgren (2)
Nereis pelagica Linné (3)

23. Hamilton Inlet, Cartwright Harbor, 53°43′ N., 57°02′ W., 6 fms., sand, mud, rock, much detritus, July 19, 1949; 9° C. (−1.6 to 10), 26°/₀₀.

Harmothoë imbricata (Linné) (1)
Lumbrineris fragilis (Müller) (2)
Praxillella praetermissa (Malmgren) (3)
Melinna cristata (Sars) (1)
Terebellides stroemii Sars (1)
Sabella crassicornis Sars (1)

24. Hamilton Inlet, Indian Harbor, 54°27′ N., 57°11′ W., 6 fms., muddy, sandy, July 25, 1949; 6° C. (−1.8 to 8), 31°/₀₀.

Harmothoë imbricata (Linné) (1)
Pholoë minuta (Fabricius) (4)
Nephtys ciliata (Müller) (1)
Capitella capitata (Fabricius) (4)

25. Strait of Belle Isle, Centre Bank, 51°31′ N., 56°35′ W., 25–30 fms., small rocks, pebbles, June 29, 1949; −0.5° C. (−1.6 to 6.0), 32°/₀₀.

Harmothoë extenuata (Grube) (1)

26. Strait of Belle Isle, 3 miles off Red Bay, 30 fms., June 29, 1949; −0.5° C. (−1.6 to 1.0), 32°/₀₀.

Harmothoë extenuata (Grube) (1)
Eusyllis blomstrandi Malmgren (3)

27. Hamilton Inlet, Trunmore Bay, 8 fms., sandy, July 25, 1949; 6° C. (−1.8 to 10), 30°/₀₀.

Nephtys longosetosa Oersted (14)
Pectinaria hyperborea (Malmgren) (1)

28. Lake Melville, 53°52′ N., 59°19′ W., 30–35 fms., mud, July 11, 1950; −0.2° C. (−0.3 to 0.3), 27°/₀₀.

Antinoë badia (Théel) (1)
Scalibregma inflatum Rathke (2)
Branchiomma infarcta (Kröyer) (2)

29. Lake Melville, 54°01.3′ N., 58°41.7′ W., 70 fms., mud, July 13, 1950; −0.9° C. (−0.1 to −0.9), 28.5°/₀₀.

Antinoë badia (Théel) (3)
Phyllodoce groenlandica Oersted (1)
Paranaitis kosteriensis (Malmgren) (1)
Nereis zonata Malmgren (11)
Aglaophamus malmgreni (Théel) (1)

30. Seven Islands Bay, 59°23.4′ N., 64°03.2′ W., 10–12 fms., stony, some mud, Aug. 10, 1950; 1.0° (−1.8 to 2.0), 31.6°/oo.

Antinoë badia (Théel) (1)
Eunoë nodosa (Sars) (1)
Harmothoë imbricata (Linné) (3)
Flabelligera affinis Sars (1)
Spirorbis spirillum (Linné) (3)

31. Seven Islands Bay, Kangalaksiorvik Fjord, 59°24′ N., 64°01′ W., 30 fms., mud, some rock, Aug. 8, 1950; −0.5° C. (−1.8 to 0.0), 32°/oo.

Eunoë oerstedi Malmgren (1)
Harmothoë extenuata (Grube) (9)
Gattyana cirrosa (Pallas) (3)
Flabelligera affinis Sars (2)
Maldane sarsi Malmgren (2)
Nicomache lumbricalis (Fabricius) (2)
Pectinaria hyperborea (Malmgren) (2)
Sabellides borealis Sars (1)
Pista maculata (Dalyell) (8)
Leaena abranchiata Malmgren (1)
Euchone analis (Kröyer) (4)
Spirorbis granulatus (Linné) (1)
Spirorbis spirillum (Linné) (1)

32. Lake Melville, off Lowland Point, 53°50′ N., 59°25′ W., 20 fms., sand, mud, rock, July 25, 1950; 0.0° C. (0.0 to 1.0), 26°/oo.

Branchiomma infarcta (Kröyer) (1)

33. Seven Islands Bay, 59°24′ N., 63°51′ W., 50 fms., mud, some rock, Aug. 8, 1950; −1.3° C. (−1.8 to −1.0), 32.5°/oo.

Antinoë badia (Théel) (2)
Eunoë nodosa (Sars) (1)
Harmothoë imbricata (Linné) (1)
Harmothoë extenuata (Grube) (1)
Pectinaria hyperborea (Malmgren) (4)
Pista flexuosa (Grube) (5)

34. Lake Melville, off St. Johns Island, 53°56.5′ N., 58°58′ W., 35 fms., mud, July 23, 1950; −0.5° C. (−0.5 to 0.2), 27.7°/oo.

Nereis zonata Malmgren (1)
Spirorbis granulatus (Linné) (1)

35. Lake Melville, 53°56′ N., 59°03′ W., 45 fms., mud, July 12, 1950; −0.6° C. (−0.6 to 0.2), 27.8°/oo.

Branchiomma infarcta (Kröyer) (2)

36. Lake Melville, 53°56′ N., 59°03′ W., 65–100 fms., sandy mud, some rock, July 14, 1950; −0.8° C. (−1.2 to −0.2), 28.85°/oo.

Harmothoë extenuata (Grube) (1)
Nereis zonata Malmgren (1)
Ephesia gracilis Rathke (1)

37. Lake Melville, west end, 53°32.2′ N., 60°03′ W., 55 fms., mud, July 8, 1950; −0.5° C. (−0.5 to −0.1), 27.9°/oo.

Nicomache lumbricalis (Fabricius) (1)
Leaena abranchiata Malmgren (1)

38. Lake Melville, west end, 53°28.8′ N., 59°59.5′ W., 15 fms., mud, Aug. 19, 1950; 1.0° C. (0.5 to 2.0), 25°/oo.

Antinoë sarsi Kinberg (1)
Nereis zonata Malmgren (1)
Pista flexuosa (Grube) (3)
Pista maculata (Dalyell) (40)
Leaena abranchiata Malmgren (12)
Terebellides stroemii Sars (1)

39. Lake Melville, west end, 53°32′ N., 60°03′ W., 57 fms., mud, Aug. 19, 1950; −0.5° C. (−0.5 to −0.1), 27.9°/oo.

Antinoë badia (Théel) (2)
Aglaophamus malmgreni (Théel) (8)
Pista maculata (Dalyell) (1)
Branchiomma infarcta (Kröyer) (3)

40. Greater Lake Melville area, Goose Bay, 53°21′ N., 60°05′ W., 30 fms., mud, July 7, 1950; 0.8° C. (0.8 to 1.5), 22.4°/oo.

Antinoë badia (Théel) (1)
Nereis zonata Malmgren (5)
Pista maculata (Dalyell) (6)
Branchiomma infarcta (Kröyer) (6)

41. Seven Islands Bay, 59°25′ N., 63°47′ W., 50 fms., stony, Aug. 10, 1950; −1.3° C. (−1.8 to −1.0), 32.7°/oo.

Pectinaria hyperborea (Malmgren) (1)
Sabellides borealis Sars (1)

42. Hamilton Inlet, off Nat's Discovery Point, 54°14.9′ N., 58°01′ W., 45 fms., stony, Aug. 27, 1950; 0.7° C. (−1.7 to 0.8), 32°/oo.

Eunoë nodosa (Sars) (1)
Harmothoë extenuata (Grube) (9)

43. Hamilton Inlet, 54°15′ N., 57°45′ W., 30 fms., mud, stones, Aug. 27, 1950; 1.0° C. (−1.7 to 1.0), 32°/oo.

Nephtys ciliata (Müller) (4)
Laonice cirrata (Sars) (1)
Lysippe labiata Malmgren (1)
Pista flexuosa (Grube) (6)

44. Hamilton Inlet, Cape Porcupine, off South Strand near Pigeon Island, 53°54′ N., 57°04′ W., 13 fms., sand, Aug. 27, 1950; 4–5° C. (−1.6 to 6.0), 32°/oo.

Harmothoë imbricata (Linné) (3)
Gattyana cirrosa (Pallas) (1)

45. St. Lewis Inlet, St. Mary's Harbor, 10 fms., mud, sandstone, shell, Aug. 30, 1950; ?° C. (−1.6 to ?), ?°/oo.

Eunoë nodosa (Sars) (1)
Harmothoë imbricata (Linné) (1)
Lumbrineris fragilis (Müller) (1)
Pectinaria hyperborea (Malmgren) (7)

46. St. Lewis Inlet, 52°21′ N., 55°56.5′ W., 35–40 fms., mud, Aug. 30, 1950; ?° C. (−1.6 to ?), ?°/oo.

Antinoë badia (Théel) (2)

47. Lake Melville, west end, 53°29′ N., 59°58′ W., 9–11 fms., mud, July 28, 1950; 2° C. (1.0 to 2.0), 15°/oo.

Nereis zonata Malmgren (1)
Pectinaria granulata (Linné) (3)
Pista maculata (Dalyell) (20)
Branchiomma infarcta (Kröyer) (1)

48. Lake Melville, anchorage off Northwest River, 6–7 fms., sandy mud, Aug. 23, 1950; 8° C. (1.0 to 8.0), 8°/oo.

Antinoë sarsi Kinberg (5)
Nephtys ciliata (Müller) (1)
Pectinaria granulata (Linné) (3)

49. Nain Bay, 35 fms., mud, Aug. 7, 1951; −1.0° C. (−1.4 to 0?), 31°/oo.

Antinoë badia (Théel) (3)
Harmothoë extenuata (Grube) (2)
Pectinaria hyperborea (Malmgren) (4)

50. Nain Bay, 45 fms., mud, Aug. 7, 1951; −1.4° C. (−1.4 to −1.0), 31.5°/oo.

Harmothoë imbricata (Linné) (1)
Harmothoë extenuata (Grube) (1)
Pectinaria hyperborea (Malmgren) (1)
Pista flexuosa (Grube) (1)

51. Nain area, Strathcona Run off Nain, 55–60 fms., sandy mud, some stone, Aug. 5, 1951; 2.5° C. (? to 4.5), 30.75°/oo.

Harmothoë extenuata (Grube) (1)

52. Hamilton Inlet, Emily Harbor, 10 fms., mud, some rock, July 29, 1951; 4° C.? (−1.6 to 8.0), 30.5°/oo.

Harmothoë imbricata (Linné) (4)
Pectinaria granulata (Linné) (1)
Pista flexuosa (Grube) (2)
Spirorbis spirillum (Linné) (20)

53. Greater Lake Melville, Terrington Basin, 8 fms., mud, July 10, 1951; 6° C. (2.0 to 8.0), 10°/oo.

Aglaophamus malmgreni (Théel) (11)
Pista maculata (Dalyell) (1)

54. Hamilton Inlet, Collinghams' Cove, 7 fms., mud, sand, Aug. 13, 1951; 4° C. (−1.5 to 6.0), 28°/oo.

Harmothoë imbricata (Linné) (1)
Nephtys ciliata (Müller) (7)

55. Lake Melville, about 3 miles northeast of Sandy Point near entrance to Goose Bay, 17–19 fms., Aug. 26, 1951; 2.0° C. (0.5 to 2.5), 24°/oo.

Antinoë sarsi Kinberg (2)
Antinoë badia (Théel) (1)
Harmothoë extenuata (Grube) (2)
Nereis zonata Malmgren (2)
Scalibregma inflatum Rathke (1)
Pista maculata (Dalyell) (10)

56. St. Lewis Inlet, Islet Bay, Schooner Cove, 15–20 fms., mud, stone, some rock, July 2, 1951; 1.0° C. (? to ?), 32°/oo.

Harmothoë imbricata (Linné) (1)
Pectinaria hyperborea (Malmgren) (1)

57. Lake Melville, 53°30′ N., 59°59′ W., 40 fms., mud, July 10, 1951; 0.0° C. (0.0 to 0.0), 26.5°/oo.

Aglaophamus malmgreni (Théel) (3)
Nicomache lumbricalis (Fabricius) (2)
Pista flexuosa (Grube) (1)
Pista maculata (Dalyell) (4)
Leaena abranchiata Malmgren (6)

58. Hamilton Inlet, Collinghams' Cove, 15 fms., rock, stones, July 5, 1951; 3° C. (−1.5 to 5.0), 29°/₀₀.

Harmothoë extenuata (Grube) (1)
Eusyllis blomstrandi Malmgren (1)

59. Greater Lake Melville, Goose Bay, 30 fms., Aug. 26, 1951; 1.1° C. (0.3 to 1.5), 21.73°/₀₀.

Antinoë badia (Théel) (2)
Nereis zonata Malmgren (1)
Pista maculata (Dalyell) (3)
Branchiomma infarcta (Kröyer) (1)

60. Greater Lake Melville, Goose Bay, 30 fms., mud, July 7, 1951; 1.4° C. (0.8 to 1.5), 21.9°/₀₀.

Antinoë sarsi Kinberg (4)
Antinoë badia (Théel) (3)
Nereis zonata Malmgren (3)
Aglaophamus malmgreni (Théel) (5)
Pista maculata (Dalyell) (5)
Branchiomma infarcta (Kröyer) (1)

61. Hamilton Inlet, Collinghams' Cove, the Narrows, tide pool, July 19, 1951.

Harmothoë imbricata (Linné) (2)

62. Nain area, Strathcona Run off Nain, 60 fms., Aug. 8, 1951; 2.5° C. (? to 4.5), 30.75°/₀₀.

Harmothoë imbricata (Linné) (1)
Harmothoë extenuata (Grube) (2)
Gattyana cirrosa (Pallas) (1)
Autolytus fallax Malmgren (1)
Nereis pelagica Linné (1)

63. Lake Melville, south side, west of Eskimo Paps, 80 fms., Aug. 25, 1951; 0.7° C. (−0.6 to −1.0), 28.4°/₀₀.

Antinoë badia (Théel) (1)
Aglaophamus malmgreni (Théel) (10)
Branchiomma infarcta (Kröyer) (2)

64. Nain area, western end Nain Bay, 15–23 fms., Aug. 9, 1951; 0.5° C. (−1.5 to 3.0), 30.4°/₀₀.

Harmothoë imbricata (Linné) (4)
Harmothoë extenuata (Grube) (3)

65. Newfoundland, Port Saunders, intertidal, June 28, 1951.

Harmothoë imbricata (Linné) (5)
Nereis virens (Sars) (2)

66. Nain area, Ford Harbor, 40 fms., Aug. 6, 1951; 0.0° C. (−1.5 to 2.0), 31.8°/₀₀.

Harmothoë imbricata (Linné) (1)
Harmothoë extenuata (Grube) (2)
Spirorbis spirillum (Linné) (20)

366148—56——2

67. Lake Melville, The Backway, about 8 miles from east end, 54°06′ N., 58°01′ W., 15–16 fms., July 4, 1952; 0.0° C. (−0.6 to 2.0), 25.5°/oo.

Harmothoë extenuata (Grube) (1)
Nereis zonata Malmgren (6)
Nephtys ciliata (Müller) (1)
Brada villosa (Rathke) (1)
Branchiomma infarcta (Kröyer) (5)
Spirorbis spirillum (Linné) (3)

68. Lake Melville, shoal area between Gull Island and Neveisik Island, 53°59′ N., 58°48′ W., 18–20 fms., July 4, 1952; 1.0° C. (−0.6 to 4.0), 25.5°/oo.

Harmothoë extenuata (Grube) (5)
Pista maculata (Dalyell) (1)

69. Ironbound Islands, southwest end of Kidlialuit Island, 55°07′ N., 58°45′ W., 4–7 fms., July 13, 1952; 1.0° C? (−1.8 to 8.0), 31°/oo.

Arcteobia anticostiensis (McIntosh) (1)
Phyllodoce mucosa Oersted (2)
Pectinaria granulata (Linné) (1)

70. Hebron Fjord, Hebron Harbor, 4–8 fms., July 18, 1952; 4° C. (−1.8 to 6.0), 29°/oo.

Harmothoë imbricata (Linné) (7)
Harmothoë extenuata (Grube) (2)

71. Hebron Fjord, Hebron Harbor, 12 fms., July 20, 1952; 2° C. (−1.8 to 4.0), 31.5°/oo.

Harmothoë imbricata (Linné) (4)

72. Okak area, channel east of Semekutak Island, about 5 miles north of Nutak, 4–15 fms., July 29, 1952; 3° C. (−1.6 to 6.0), 31°/oo.

Nereis pelagica Linné (1)

73. Okak area, Nutak Harbor just southwest of Cape Mugford, 3–3½ fms., July 29, 1952; 5° C. (−1.6 to 8.0), 30°/oo.

Harmothoë imbricata (Linné) (1)
Praxillella praetermissa (Malmgren) (1)

74. Hebron Fjord, about 3 miles east of Freytag Inlet, 100 fms., July 31, 1952; −1.75° C. (−1.8 to −1.7), 32.8°/oo.

Antinoë badia (Théel) (1)
Prionospio malmgreni Claparède (1)
Pectinaria hyperborea (Malmgren) (1)

75. Okak area, Nutak Harbor, 0–4 fms., Aug. 6, 1952; 6–7° C. (−1.6 to 8.0), 30°/oo.

Harmothoë imbricata (Linné) (4)

76. Okak area, channel east of Semekutak Island, about 5 miles north of Nutak, 4–15 fms., Aug. 9, 1952; 4° C. (−1.8 to 6), 30°/oo.

Nereis pelagica Linné (1)

77. Okak area, Kiglapait Harbor, about 15 miles northwest of Port Manvers, 3–5 fms., Aug. 10, 1952; 5° C. (—1.8 to 8), 30°/oo.

Harmothoë imbricata (Linné) (9) *Flabelligera affinis* Sars (1)

78. Lake Melville, shoal area west of Gull Island, 17–20 fms., Aug. 24, 1952; 3.5° C. (—0.6 to 4.0), 25°/oo.

Harmothoë extenuata (Grube) (5) *Nereis zonata* Malmgren (5)

79. Lake Melville, The Backway, about 8 miles from east end, 54°06.3′ N., 58°01.1′ W., 16–20 fms., Aug. 25, 1952; 2° C. (—0.6 to 2.0), 25°/oo.

Melaenis lovéni Malmgren (1) *Branchiomma infarcta* (Kröyer) (1)

Distribution of Labrador Polychaetes

The systematic, ecological, hydrographic, and geographic distributions of the Labrador polychaetes are summarized in table 1. The collections include 1,187 specimens representing 68 species and 22 families of Polychaeta. The Polynoidae are the most abundant as to number of species (11) as well as number of specimens (22 percent of the total number). The Terebellidae, Sabellidae, and Ampharetidae each have six species.

The Labrador polychaete stations may be subdivided, on the basis of the hydrographic data of temperature, depth, and salinity, into three main categories (see table 2 for summary of hydrographic data and station numbers):

I. Permanent High Arctic: Marine environment where the waters are continuous with those of the Arctic Ocean and circumpolar areas (Labrador current water of Arctic origin). The water temperatures are below 0° C. (mostly around —1.8° C.) the year round, the depths are generally 30 to 50 fathoms, i. e., below the upper layers where summer warming takes place, and the salinity is about 32 °/oo.

II. High Arctic with Summer Warming: Marine environment where the Arctic waters are in the shallow coastal areas and would be effected by the warming of the surface layers. The range of temperatures throughout the year is —1.8 to 12° C., the depths mostly 4 to 40 fathoms, and the salinity mostly between 30 and 32 °/oo.

III. Special Conditions in Greater Lake Melville Estuary: Lake Melville is separated from Hamilton Inlet and the Atlantic Ocean by both a constriction and a sill (Nutt, 1953), resulting in a highly complicated exchange mechanism. The stations within Lake Melville may be subdivided into two categories:

(a) Permanent High Arctic but not quite as cold. It includes the deeper areas of 30 to 100 fathoms, with bottom temperatures mostly between —0.6 to 0.0° C., and salinities of about 28 °/oo.

(b) Mostly above 0° C. with greater or lesser summer warming. It includes the shallower areas of mostly 15 to 30 fathoms, temperatures of mostly 0 to 2° C., and salinities of mostly 21 to 25 °/oo.

TABLE 1.—*Distribution of species*

Families and species	Page reference	Hydrographic distribution*					Ecological distribution				Geographic distribution					
		I	II	III (a)	III (b)	Gulf St. Lawrence	Mud (42 sp.)	Mud & rock (30 sp.)	Rock (18 sp.)	Sand (6 sp.)	Mainly Arctic (6 sp., 9%)	Arctic-boreal (25 sp. 37%)	Arctic-boreal-Antarctic (4 sp., 6%)	Mainly boreal (2 sp., 3%)	Arctic-boreal-Lusitanian (14 sp., 20%)	Cosmopolitan (17 sp., 25%)
POLYNOIDAE (11 species; 262 specimens)																
Melaenis lovéni Malmgren (2)	547	x			x		x				x					
Antinoë sarsi Malmgren (12)	547				x		x					x				
Antinoë badia (Théel) (30)	547	x	x	x	x		x	x			x					
Eunoë nodosa (Sars) (7)	548	x	x				x	x	x			x				
Eunoë oerstedi Malmgren (3)	548	x	x					x	x			x				
Harmothoë imbricata (Linné) (56)	549	x	x			x	x	x	x	x					x	
Harmothoë extenuata (Grube) (73)	549	x	x	x	x		x	x	x							x
Harmothoë impar (Johnston)	550											x				
Arcteobia anticostiensis (McIntosh) (9)	551	x	x				x	x				x				
Gattyana cirrosa (Pallas) (68)	551	x	x				x	x		x		x				
Gattyana amondseni (Malmgren) (2)	552	x					x	x				x				
SIGALIONIDAE (1 species; 4 specimens)																
Pholoë minuta (Fabricius) (4)	552		x				x						x			
PHYLLODOCIDAE (3 species; 4 specimens)																
Phyllodoce groenlandica Oersted (1)	553			x			x					x				
Phyllodoce mucosa Oersted (2)	553		x												x	
Paranaitis kosteriensis (Malmgren) (1)	554			x			x							x		

HESIONIDAE (1 species; 2 specimens)																
Castalia aphroditoides (Fabricius) (2)	554	x					x				x					
SYLLIDAE (4 species; 25 specimens)																
Autolytus alexandri Malmgren (1)	555		x									x				
Autolytus fallax Malmgren (2)	555		x						x			x				
Sphaerosyllis erinaceus Claparède (1)	555		x						x			x				
Eusyllis blomstrandi Malmgren (21)	555		x						x						x	
NEREIDAE (3 species; 53 specimens)																
Nereis virens Sars (2)	556					x								x		
Nereis pelagica Linné (14)	557		x						x							x
Nereis zonata Malmgren (37)	557			x	x		x	x				x				
NEPHTYIDAE (3 species; 80 specimens)																
Aglaophamus malmgreni (Théel) (38)	557			x	x		x								x	
Nephtys longosetosa Oersted (14)	558		x							x						x
Nephtys ciliata (Müller) (28)	558	x	x		x		x	x	x			x				
SPHAERODORIDAE (1 species; 1 specimen)																
Ephesia gracilis Rathke (1)	559			x				x								x
ONUPHIDAE (1 species; 1 specimen)																
Nothria conchylega (Sars) (1)	560		x						x						x	
LUMBRINERIDAE (1 species; 6 specimens)																
Lumbrineris fragilis (Müller)	560							x							x	
SPIONIDAE (2 species; 3 specimens)																
Prionospio malmgreni Claparède (2)	561	x					x									x
Laonice cirrata (Sars) (1)	561		x					x							x	
CIRRATULIDAE (2 species; 47 specimens)																
Cirratulus cirratus (Müller) (1)	562	x					x									x
Chaetozone setosa Malmgren (46)	562	x					x									x
FLABELLIGERIDAE (5 species; 25 specimens)																
Flabelligera affinis Sars (5)	563	x	x					x	x							x

*For explanation see p. 541.

TABLE 1.—*Distribution of species*—Continued

Families and species	Page reference	Hydrographic distribution*					Ecological distribution				Geographic distribution					
		I	II	III (a)	III (b)	Gulf St. Lawrence	Mud (42 sp.)	Mud & rock (30 sp.)	Rock (18 sp.)	Sand (6 sp.)	Mainly Arctic (6 sp., 9%)	Arctic-boreal (25 sp. 37%)	Arctic-boreal-Antarctic (4 sp., 6%)	Mainly boreal (2 sp., 3%)	Arctic-boreal-Lusitanian (14 sp., 20%)	Cosmopolitan (17 sp., 25%)
Pherusa plumosa (Müller) (5)	563		x				x									x
Brada villosa (Rathke) (1)	564				x											x
Brada inhabilis (Rathke) (1)	565	x					x				x					
Brada granosa Stimpson (13)	565	x					x					x				
SCALIBREGMIDAE (2 species; 3 specimens)																
Scalibregma inflatum Rathke (3)	565			x	x		x									x
Polyphysia crassa (Oersted)	566														x	
OPHELIIDAE (2 species; 4 specimens)																
Travisia forbesii Johnston (2)	566		x							x			x			
Ophelia limacina (Rathke) (2)	567		x							x		x				
CAPITELLIDAE (1 species; 4 specimens)																
Capitella capitata (Fabricius) (4)	569		x				x									x
MALDANIDAE (3 species; 17 specimens)																
Praxillella praetermissa (Malmgren) (6)	569		x				x	x							x	
Maldane sarsi Malmgren (2)	569	x						x								x
Nicomache lumbricalis (Fabricius) (9)	570	x		x			x	x								x
PECTINARIIDAE (2 species; 314 specimens)																
Pectinaria hyperborea (Malmgren) (304)	570	x	x				x	x	x	x		x				
Pectinaria granulata (Linné) (10)	570		x		x		x	x	x			x				

AMPHARETIDAE (6 species; 20 specimens)																
Melinna cristata (Sars) (1)	571		x					x					x			
Ampharete acutifrons (Grube) (1)	572		x				x								x	
Ampharete arctica Malmgren (1)	572	x						x				x				
Lysippe labiata Malmgren (2)	573		x				x	x				x				
Samytha sexcirrata (Sars) (3)	573		x				x					x				
Sabellides borealis Sars (12)	573	x					x	x	x			x				
TEREBELLIDAE (6 species; 193 specimens)																
Pista flexuosa (Grube) (40)	574	x	x	x	x		x	x				x				
Pista maculata (Dalyell) (121)	574	x		x	x		x	x				x				
Leaena abranchiata Malmgren (21)	575	x		x	x		x	x					x			
Thelpus cincinnatus (Fabricius) (5)	575		x						x							x
Polycirrus medusa Grube (1)	575	x					x								x	
Terebellides stroemii Sars (5)	576	x	x		x		x	x								x
SABELLIDAE (6 species; 65 specimens)																
Sabella crassicornis Sars (1)	576		x					x							x	
Potamilla neglecta (Sars) (1)	576	x					x									x
Branchiomma infarcta (Kröyer) (43)	577	x		x	x		x	x			x					
Chone dunéri Malmgren (2)	578		x				x								x	
Euchone analis (Kröyer) (4)	577	x							x			x				
Euchone papillosa (Sars) (14)	578	x					x					x				
SERPULIDAE (2 species; 54 specimens)																
Spirorbis granulatus (Linné) (2)	578	x		x			x		x			x				
Spirorbis spirillum (Linné) (52)	579	x	x		x			x	x						x	

*For explanation see p. 541.

TABLE 2.—*Summaries of the hydrographic data and the Labrador polychaete stations upon which they are based. (See fig. 1 for station locations)*

	I	II	III	
			Special conditions of temperature and dilution in Greater Lake Melville Estuary	
	Permanent High Arctic	High Arctic with summer warming	(a) Permanent High Arctic but not quite as cold; higher salinity	(b) Mostly above 0° C.; lower salinity
Bottom temperature in ° C.	Mostly −1.8	Mostly −1.6–6.0	Mostly −0.6–0.0	Mostly 0.0–2.0.
	Range: −1.85–0.0	Range: −1.8–12.0	Range: −1.2–1.0	Range: −0.6–8.0.
Depth in fathoms	Mostly 30–50	Mostly 4–40		Mostly 15–30.
	Range: 15–125	Range: 0–60	Range: 30–100	Range: 6–40.
Salinity in °/₀₀	Mostly 32	Mostly 30–32	Mostly 28	Mostly 21–25.
	Range: 30.68–33.12	Range: 26–32.3	Range: 26.5–28.85	Range: 8–26.
Stations:				
Seven Islands Bay	31, 33, 41	30		
Hebron Fjord	10, 11, 12, 13, 14, 74	18, 70, 71		
Okak area		72, 73, 75, 76, 77		
Nain area	49, 50	51, 62, 64, 66		
Davis Inlet		20		
Kaipokok Inlet	7, 8, 9, 19			
Ironbound Islands		69		
Hamilton Inlet		23, 24, 27, 42, 43, 44, 52, 54, 58, 61.		
Greater Lake Melville Estuary.			28, 29, 34, 35, 36, 37, 39, 57, 63.	32, 38. 40, 47, 48, 53, 55, 59, 60, 67, 68. 78, 79.
St. Lewis Inlet	5, 6, 46	16, 21, 45, 56		
Strait of Belle Isle		1, 2, 3, 4. 15, 17, 22, 25, 26.		

The hydrographic distribution of the 65 polychaete species in the *Blue Dolphin* collections from Labrador (not including *Harmothoë impar* and *Polyphysia crassa* from the Owen Bryant collections from Labrador, and *Nereis virens* from Newfoundland only) are shown in table 1. Of the 44 species found only along the coast, inlets, and fjords (I or II or both, not in Lake Melville Estuary), 14 species were found only in I, 22 species only in II, and 8 species were in both I and II. Of the eight species found only in the Greater Lake Melville Estuary, three (*Phyllodoce groenlandica, Paranaitis kosteriensis, Ephesia gracilis*) were only in III(a), two (*Antinoë sarsi, Brada villosa*) only in III(b), and three (*Nereis zonata, Aglaophamus malmgreni, Scalibregma inflatum*) were in both III(a) and (b). Of the 13 species found in both the outer coast as well as in the Greater Lake Melville Estuary, three (*Antinoë badia, Harmothoë extenuata, Pista flexuosa*) were in all four areas (I, II, III(a), and III(b)); three (*Pista maculata, Leaena abranchiata, Branchiomma infarcta*) in

I, III(a), and III(b); three (*Nephtys ciliata, Terebellides stroemii, Spirorbis spirillum*) in I, II, and III(b); a single species (*Pectinaria granulata*) in II and III(b); a single species (*Melaenis lovéni*) in I and III(b); and two species (*Nicomache lumbricalis, Spirorbis granulatus*) in I and III(a).

Family Polynoidae

Genus *Melaenis* Malmgren, 1865

Melaenis lovéni Malmgren, 1865

Melaenis lovéni Wesenberg-Lund, 1953, p. 27.—Pettibone, 1954, p. 214.

One large specimen was 90 mm. long and 25 mm. wide, including setae.

New records: Labrador: Kaipokok Inlet and The Backway, Lake Melville, 16 to 45 fms., silt bottom; 2 specimens, Stations 19, 79.

Distribution: Widely distributed in the Arctic. Also Bering Sea; off Labrador. In 1.7 to 111 fathoms.

Genus *Antinoë* Kinberg, 1855, sensu Malmgren, 1865

Key to the species of Antinoë from Labrador

1. Neurosetae of 2 kinds—with capillary tips and with slender, relatively obtuse and slightly curved ones. Anterior pair of eyes larger than posterior pair . . . . . **A sarsi**
   Neurosetae all with capillary tips. Anterior and posterior pairs of eyes rather small, subequal . . . . . **A. badia**

Antinoë sarsi Malmgren, 1865

Antinoë sarsi not Moore, 1909b, p. 135 (=*A. badia*, examined in USNM).—Pettibone, 1954, p. 215.
Harmothoë sarsi Wesenberg-Lund, 1953, p. 23.

New records: Labrador: West end and Goose Bay, Lake Melville, 6 to 30 fms., on bottoms of mud; 12 specimens, Stations 38, 48, 55, 60.

Distribution: Widely distributed in the Arctic. Also Iceland, Faroes to Great Britain, the Baltic; Labrador to Maine; Bering Sea; north Japan Sea. In 3 to 1,215 fathoms.

Antinoë badia (Théel, 1879)

Antinoë sarsi Malmgren, 1865, p. 75 (part).—Moore, 1909b, p. 135 (examined in USNM).
Polynoë badia Théel, 1879, p. 18, pl. 1, figs. 9–12.—Wirén, 1883, p. 390.
Harmothoë (*Antinoëlla*) *badia* Augener, 1928, p. 689; 1933, p. 199.
Antinoëlla badia Gorbunov, 1946, p. 38.—Zatsepin, 1948, p. 107, pl. 28, fig. 9b.
Harmothoë badia Wesenberg-Lund, 1950a, p. 7; 1950b, p. 22; 1951, p. 15; 1953, p. 21.

866148—56——3

DESCRIPTION: Length 23–60 mm., width including setae 12–30 mm. Segments 35–37 (up to 70 mm. long, 39 segments (Augener, 1933)). Prostomium with delicate cephalic peaks; 4 eyes small, subequal. Antennae, dorsal cirri, parapodia, and general body shape similar to *A. sarsi*. Elytra thin, soft, smooth, with delicate short clavate papillae and scattered soft conical tubercles. Setae yellow or golden; neurosetae all with capillary tips. Color in alcohol: Reddish brown middorsally up to or including dorsal tubercles and elytrophores; ventral surface reddish brown or without color; elytra brownish, especially medially and posteriorly.

PARASITES: One specimen had the parasitic copepod *Herpyllobius arcticus* Steenstrup and Lütken attached to the prostomium (identified by Paul Illg).

NEW RECORDS: LABRADOR: Seven Islands Bay, Hebron Fjord, Nain area, Kaipokok Inlet, Lake Melville, Goose Bay, St. Lewis Inlet, 10 to 100 fms., on bottoms of mud, silt, mud with rock; 30 specimens, Stations 7, 11, 28–30, 33, 39, 40, 46, 49, 55, 59, 60, 63, 74. FRANZ JOSEF LAND: Aberdore Channel east Alger Island, 10 fms., Baldwin-Zeigler Polar Expedition, 1901.

DISTRIBUTION: Widely distributed in the Arctic: Canadian Arctic, Davis Strait, Greenland, Jan Mayen, Norwegian Sea, Spitsbergen, Franz Josef Land, Novaya Zemlya, Kara Sea, Siberian Arctic. Also Iceland, Faroes, Skagerrak; Labrador; Bering Sea. In 10 to 1,956 fathoms.

Genus *Eunoë* Malmgren, 1865

Eunoë nodosa (Sars, 1860)

Eunoë nodosa Pettibone, 1954, p. 217, fig. 26, *c*.
Harmothoë (*Eunoë*) *nodosa* Wesenberg-Lund, 1953, p. 16 (part).

NEW RECORDS: LABRADOR: Seven Islands Bay, Hebron Fjord, Hamilton Inlet, St. Lewis Inlet, Strait of Belle Isle, 10 to 95 fms., on bottoms of mud, stones, rubble, and various combinations of stones, mud, rocks, sandstone, and shell; 7 specimens, Stations 4, 11, 30, 33, 42, 45.

DISTRIBUTION: Widely distributed in the Arctic. Also Iceland, Scandinavian coasts to English Channel; Hudson Bay to Massachusetts; Bering Sea; north Japan Sea. In 10 to 690 fathoms.

Eunoë oerstedi Malmgren, 1865

Eunoë oerstedi Pettibone, 1954, p. 219, fig. 26,*d*.

NEW RECORDS: LABRADOR: Seven Islands Bay, Strait of Belle Isle, 25 to 40 fms., on bottoms of coral and rock, rubble, and mud with rock; 3 specimens, Stations 2, 4, 31.

DISTRIBUTION: Widely distributed in the Arctic. Also from Norway to English Channel; Labrador to Massachusetts; Bering Sea to central California; Japan. In low water to 516 fathoms.

Genus *Harmothoë* Kinberg, 1857

Key to the species of Harmothoë from Labrador

1. Anterior pair of eyes anteroventral on prostomium (slightly posterior and lateral to cephalic peaks), not visible dorsally. Elytra with or without soft globular macrotubercles near posterior border . . . . . **H. imbricata**
   Anterior pair of eyes anterolateral on prostomium, visible dorsally 2
2. Elytra with macrotubercles globular, sausage-shaped, or elongate, rodlike, not wider at base and sharply set off from elytral surface . . . **H. extenuata**
   Elytra with soft macrotubercles near posterior border, wider at base, not sharply set off from elytral surface. . . . . **H. impar**

Harmothoë imbricata (Linné, 1767)

Harmothoë imbricata Moore, 1909b, p. 134 (part; mixed with *H. extenuata*).—Wesenberg-Lund, 1953, p. 17.—Pettibone, 1954, p. 220, fig. 26,*a*,*c*.
Laenilla glabra Moore, 1909b, p. 135; not *L. glabra* Malmgren, 1865 (examined in USNM).

NEW RECORDS: LABRADOR: Seven Islands Bay, Hebron Fjord, Okak area, Nain area, Hamilton Inlet, Backway, Lake Melville, St. Lewis Inlet, Strait of Belle Isle. NEWFOUNDLAND. Intertidal to 60 fms., on bottoms of mud, sand, and various combinations of mud, sand, sandstone, rock, coral, shells, detritus, and in tide pool; 56 specimens, Stations 2, 23, 24, 30, 33, 44, 45, 50, 52, 54, 56, 61, 62, 64–66, 70, 71, 73, 75, 77.

DISTRIBUTION: Widely distributed in the Arctic. Also Iceland and Norway to Mediterranean and Adriatic; Labrador to New Jersey; Bering Sea to southern California; Japan. In low water to 2,030 fathoms.

Harmothoë extenuata (Grube, 1840)

Lagisca extenuata Wesenberg-Lund, 1953, p. 25.
Harmothoë extenuata Pettibone, 1954, p. 222.

NEW RECORDS: LABRADOR: Seven Islands Bay, Hebron Fjord, Nain area, Davis Inlet, Kaipokok Inlet, Hamilton Inlet, east and west ends Lake Melville, St. Lewis Inlet, Strait of Belle Isle, 4 to 100 fms., on bottoms of mud, silt, stones, rubble, and various combinations of mud, coral, sand, rocks, pebbles, stones; 73 specimens, Stations 1, 2, 4, 6, 7, 9, 14, 16, 20–22, 25, 26, 31, 33, 36, 42, 49–51, 55, 58, 62, 64, 66–68, 70, 78. Off Labrador: Egg Harbor, 7 fms.; 20 miles northeast Nain; shoal southeast of Nain; St. Pierre Harbor, 5 fms., all by Owen Bryant, 1908.

DISTRIBUTION: Widely distributed in the Arctic. Also Iceland, Norway to Mediterranean and Adriatic; Hudson Bay to Chesapeake Bay; Bering Sea to southern California; north Japan Sea; South Africa. In low water to 1,000 fathoms.

***Harmothoë impar* (Johnston, 1839)**

Polynoë impar Johnston, 1839, p. 436, pl. 22, figs. 3–9.—Théel, 1879, pp. 9, 15.
Evarne impar Malmgren, 1865, p. 71, pl. 9, fig. 7.—Verrill, 1881, p. 319.—Not McIntosh, 1900, p. 353, figs.—Not Southern, 1914, p. 53.
Harmothoë impar Moore, 1902, p. 270.—Not Alaejos y Sanz, 1905, p. 60, figs.—Ditlevsen, 1917, p. 12, fig. 1, pl. 2, fig. 16, pl. 3, fig. 11.—Eliason, 1920, p. 20.—Not Fauvel, 1923, p. 59, fig. 21,a-f.—Augener, 1928, p. 678; 1933, p. 197.—Annenkova, 1937, p. 151, pl. 1, figs. 4, 8; 1938, p. 135.—Gorbunov, 1946, p. 38.—Thorson, 1946, p. 48.—Not Zatsepin, 1948, p. 108, pl. 28, fig. 12,b–f,h.—Wesenberg-Lund, 1950a, p. 6; 1950b, p. 21; 1951, p. 14 (part); 1953, p. 19.
Harmothoë fragilis Moore, 1910, p. 353, pl. 29, figs. 29, 30, pl. 30, figs. 31–33; 1923, p. 256.
Harmothoë bonitensis Essenberg, 1917, p. 48, pl. 2, figs. 1–11.
Evarnella impar Chamberlin, 1920, p. 7.—Treadwell, 1937, p. 25 (part; examined in USNM).
Harmothoë impar var. *grandispina* Annenkova, 1937, pp. 152, 208, pl. 1, fig. 2; 1938, p. 135.
Harmothoë impar var. *parvispinosa* Annenkova, 1937, pp. 152, 209, pl. 2, fig. 10; 1938, p. 135.

DESCRIPTION: Segments 37–41. Body wide, flattened dorsoventrally, fragmenting easily. Prostomium with cephalic peaks prominent; eyes large, anterior pair dorsolateral in region of greatest prostomial width. Antennae and dorsal cirri with short papillae. Elytra with numerous conical microtubercles—some hooked, with short delicate scattered papillae on elytral border and surface, with large soft tubercles near external border, tubercles wider at the base and not sharply set off from elytral surface (may give border of elytra a scalloped effect). (The elytra differ thus from the description of *H. impar* as given by McIntosh (1900), Fauvel (1923), and others; this has been indicated previously by Ditlevsen (1917).) Noto- and neuropodia extend out into digitiform acicular lobes; tip of neuropodial lobe with tentacularlike process above the projecting aciculum. Notosetae distinctly stouter than neurosetae, with long spinous regions, with pointed to blunt bare tips. Neurosetae delicate, with long spinous regions, upper ones more slender, with entire tips; mostly with tips slightly hooked, with a secondary tooth or a remnant of it. Color in alcohol: Darkly pigmented dorsally, with wide transverse brown bands between the elytrophores and dorsal tubercles, with an area without color middorsally and two transverse bands converging in the region of the elytrophores and dorsal tubercles; elytra with mottled brownish coloration.

NEW RECORDS: LABRADOR: Halfway between Cape Mugford and Hebron, 60 fms., Owen Bryant, 1908. CANADIAN ARCTIC: Ducketts Cove, Hurd Channel, Melville Peninsula, 12 fms., 1933; east end Cobourg Island, Baffin Bay, 75°40′ N., 78°50′ W., 23–40 fms., 1935; south end Cobourg Island, 75°40′ N., 78°58′ W., 11–20 fms.; all by R. A. Bartlett. EAST COAST NORTH AMERICA: Off Nova Scotia, Maine, Massachusetts, 20–112 fms., U. S. Fish Commission (Verrill, identified).

DISTRIBUTION: Widely distributed in the Arctic. Also Danish Seas; Labrador to Massachusetts; southern California; north Japan Sea. In 1 to 1,611 fathoms.

Genus *Arcteobia* Annenkova, 1934

Arcteobia anticostiensis (McIntosh, 1874)

Eupolynoë anticostiensis Moore, 1909b, p. 136.
Arcteobia anticostiensis Pettibone, 1954, p. 225.

Four specimens were commensal in the sinuous tubes of the terebellid *Pista flexuosa* (Grube), one worm per tube; also one specimen was in a broken clay tube of a maldanid.

NEW RECORDS: LABRADOR: Hebron Fjord, Ironbound Islands, St. Lewis Inlet, 4–95 fms., on bottoms of mud, mud and rock; 9 specimens, Stations 5, 11, 14, 69.

DISTRIBUTION: Arctic Alaska; Labrador to Massachusetts; Bering Sea; north Japan Sea. In low water to 123.5 fathoms.

Genus *Gattyana* McIntosh, 1897

Key to the species of Gattyana from Labrador

1. Elytral microtubercles 1- to 4-pronged. Lower neurosetae with the bare distal tips not longer than the spinous regions . . . . . **G. cirrosa**
   Elytra microtubercles conical and bifid. Lower neurosetae with the bare tips as long as or longer than the spinous regions . . . . . **G. amondseni**

Gattyana cirrosa (Pallas, 1766)

Gattyana cirrosa Moore, 1909b, p. 135.—Wesenberg-Lund, 1953, p. 15.—Pettibone, 1954, p. 226, fig. 26,b.

NEW RECORDS: LABRADOR: Seven Islands Bay, Hebron Fjord, Nain area, Kaipokok Inlet, Hamilton Inlet, 13–125 fms., on bottoms of mud, silt, sand, and various combinations of mud, rock, pebbles, and sand; in old tubes of *Pectinaria;* in old clay tube of a maldanid; 68 specimens, Stations 7, 9–12, 14, 18, 31, 44, 62.

DISTRIBUTION: Widely distributed in the Arctic. Also Iceland, Norway to France; Hudson Bay to Massachusetts; Bering Sea to Washington; north Japan Sea. In low water to 630 fathoms.

Gattyana amondseni (Malmgren, 1867)

Nychia amondseni Malmgren, 1867, p. 5, pl. 1, fig. 4.—Verrill, 1881, pp. 303, 306.—Webster and Benedict, 1884, p. 700.

Gattyana amondseni Moore, 1902, p. 259; 1908, p. 336; 1909b, p. 136.—Augener, 1928, p. 693; 1933, p. 204.—Thorson, 1946, p. 46.—Wesenberg-Lund, 1950a, p. 5; 1950b, p. 14; 1951, p. 10.

DESCRIPTION: Length 16–18 mm., width including setae 6–8 mm. (up to 29 mm. long, 11 mm. wide, Malmgren, 1867). Segments 35–36. Papillae on antennae, dorsal cirri, and elytra much shorter than on *G. cirrosa*. Elytra smooth, iridescent, with elytral fringe confined mostly to external border, not having the straggly appearance of *G. cirrosa*. Elytra whitish, uniformly tan, tan mottled with brown, or tannish with a darker spot over the place of attachment. Elytral microtubercles smaller than in *G. cirrosa*, conical and bifid.

NEW RECORDS: LABRADOR: Hebron Fjord, 60–95 fms., on bottoms of mud and fine sandy mud with rock; 2 specimens, Stations 10, 11. EAST COAST NORTH AMERICA: Off Nova Scotia, Massachusetts, Rhode Island, 13–90 fms., U. S. Fish Commission (Verrill, identified).

DISTRIBUTION: Scattered records in the Arctic: Baffin Bay, Davis Strait, West Greenland, Spitsbergen. Also west coast of Norway; Labrador to Rhode Island; southeastern Alaska and Gulf of Alaska. In 5 to 378 fathoms.

Family SIGALIONIDAE

Genus *Pholoë* Johnston, 1839

Pholoë minuta (Fabricius, 1780)

Pholoë minuta Wesenberg-Lund, 1953, p. 28.—Pettibone, 1954, p. 230, fig. 26,f.

NEW RECORD: LABRADOR: Hamilton Inlet, 6 fms., mud and sand; 4 specimens, Station 24.

DISTRIBUTION: Widely distributed in the Arctic. Also Iceland, Norway to northern France; Labrador to Rhode Island; Bering Sea to southern Oregon; north Japan Sea; South Africa. In low water to 1,254 fathoms.

Family PHYLLODOCIDAE

Both genera represented have the prostomium with 4 subulate frontal antennae, tentacular cirri 4 pairs on 3 tentacular segments, uniramous parapodia with compound setae.

Key to the genera of Phyllodocidae from Labrador

1. First tentacular segment rudimentary dorsally, with 1 pair tentacular cirri lateral to prostomium; second segment distinct, with 2 pairs tentacular cirri; third segment distinct, with 1 pair tentacular cirri, 1 pair normal ventral

cirri, with the first setigerous lobes. Prostomium cordiform, with an occipital tubercle in the posterior notch (may be withdrawn).
Phyllodoce (Anaitides)

First 2 tentacular segments fused, well developed, encircle prostomium, with 3 pairs tentacular cirri; third tentacular segment distinct, with 1 pair tentacular cirri, 1 pair normal ventral cirri, with the first setigerous lobes. Prostomium oval or oval with a posterior extension, with or without an occipital tubercle . . . . . **Paranaitis**

Genus *Phyllodoce* Savigny, 1817

Subgenus *Anaitides* Czerniavsky, 1882

Both species have the proboscis with 12 longitudinal rows of papillae basally, 6 on each side, 8 to 20 papillae per row.

Key to the species of Phyllodoce (Anaitides) from Labrador

1. Ventral cirri distally blunt or slightly pointed. Dorsal cirri subrectangular. **P. groenlandica**
   Ventral cirri acutely pointed distally. Anterior dorsal cirri suboval, median ones subrectangular . . . . . **P. mucosa**

Phyllododce (Anaitides) groenlandica Oersted, 1843

Phyllodoce groenlandica Wesenberg-Lund 1953, p. 30.—Pettibone, 1954, p. 236, fig. 27,d,i.
Phyllodoce mucosa Moore, 1909b, p. 134; not *P. mucosa* Oersted, 1843 (examined in USNM).

New record: Labrador: East end Lake Melville, 70 fms., mud; 1 specimen, Station 29.

Distribution: Widely distributed in the Arctic. Also Ireland, Scandinavian countries to English Channel; Hudson Bay to Massachusetts; Bering Sea to Washington Sound; north Japan Sea. In low water to 800 fathoms.

Phyllododce (Anaitides) mucosa Oersted, 1843

Phyllodoce mucosa Malmgren, 1867, p. 21, pl. 2, fig. 7.—Webster and Benedict, 1887, p. 710.—Moore, 1909a, p. 336; not 1909b, p. 134.—Fauvel, 1923, p. 152, fig. 54,a–e.—Rioja, 1941, p. 682.—Berkeley and Berkeley, 1948, p. 46, fig. 68.—Wesenberg-Lund, 1950a, p. 10, pl. 1, fig. 3; 1950b, p. 34; 1951, p. 27.
Anaitides mucosa Friedrich, 1939, p. 122.—Hartman, 1948, p. 19.—Zatsepin, 1948, p. 111, pl. 29, fig. 4,b–c.

New records: Labrador: Ironbound Islands, 4–7 fms.; 2 specimens, Station 69. East Coast North America: Off Maine, Long Island Sound, Gulf of Mexico, in low water to 146 fms., U. S. Fish Commission.

Distribution: Scattered records in the Arctic: Greenland (?), Barents Sea, Siberian Arctic. Also Iceland, Faroes, Danish and Swedish coasts to France, Mediterranean; Hudson Bay to Long Island Sound, Gulf of Mexico, Alaska to southern California and México. In low water to 245 fathoms.

Genus *Paranaitis* Southern, 1914

Paranaitis kosteriensis (Malmgren, 1867)

Anaitis kosteriensis Malmgren, 1867, p. 20.—Bergström, 1914, p. 156, fig. 52.
Paranaitis wahlbergi Southern, 1914, p. 67, pl. 8, fig. 16 (see Fauvel, 1923); not *Anaitis wahlbergi* Malmgren, 1865.
Phyllodoce (*Anaitis*) *kosteriensis* Fauvel, 1923, p. 157, fig. 56,a–c.

Description: Length 35 mm., width without setae 4 mm. (up to 85 mm. long, Bergström, 1914). Segments numerous, 82 (specimens from Labrador) to about 155 (Fauvel, 1923). Body rather slender, flattened dorsoventrally, slightly attenuated anteriorly and posteriorly. Prostomium oval, with a distinct posterior extension, usually with an occipital tubercle (not seen on specimen examined; hidden by tentacular segment?), with 4 short antennae and 2 large eyes each with a distinct lens. Tentacular cirri rather slender, longest reach setiger 4. Dorsal cirri large, imbricated, reniform, nearly symmetrical, easily detached. Distal tips of bifid setigerous lobe with upper lobe longer than the lower one. Color in alcohol: Without color or irregularly streaked deep purplish.

Remarks: *P. kosteriensis* has been referred to *P. wahlbergi* Malmgren by Ditlevsen (1909, 1917), Southern (1914), and others; the two species appear to be distinct. In *P. wahlbergi* (specimens examined from Greenland and Canadian Arctic), the body is stouter (6–9 mm. wide without setae); the prostomium is oval, without distinct posterior extension, without occipital tubercle; the distal tips of the bifid setigerous lobes are subequal or upper lobes slightly longer.

New record: Labrador: East end Lake Melville, mud, 70 fms.; 1 specimen, Station 29.

Distribution: Sweden, Scotland, Ireland; Labrador. In 6 to 185 fathoms.

Family Hesionidae

Genus *Castalia* Savigny, 1820; emend. Fauvel, 1923

Castalia aphroditoides (Fabricius, 1780)

Castalia aphroditoides Wesenberg-Lund, 1953, p. 34.—Pettibone, 1954, p. 239, fig. 28,a,b.

New records: Labrador: Kaipokok Inlet, 45 fms., silt bottom; 2 specimens, Stations 7, 8.

Distribution: Widely distributed in the Arctic. Also Bering Sea; Denmark; Hudson Bay to Labrador. In 2 to 75.5 fathoms.

Family Syllidae

Genus *Autolytus* Grube, 1850

Autolytus alexandri Malmgren, 1867

Autolytus alexandri Pettibone, 1954, p. 246.

New record: Labrador: Strait of Belle Isle, 30–40 fms.; 1 specimen, Station 22.

Distribution: Widely distributed in the Arctic. Also Iceland, Labrador to North Carolina; Bering Sea to Washington. In low water to 123.5 fathoms; sexual forms at surface.

Autolytus fallax Malmgren, 1867

Autolytus fallax Pettibone, 1954, p. 247, fig. 29,c-f.

New records: Labrador: Nain, Strait of Belle Isle, 25–60 fms., on bottoms of coral and rock; in transparent tube on old *Pectinaria* tube; 2 specimens, Stations 2, 62.

Distribution: Widely distributed in the Arctic. Also Faroes; Labrador. In low water to 75.5 fathoms; sexual stolons at surface.

Genus *Sphaerosyllis* Claparède, 1863

Sphaerosyllis erinaceus Claparède, 1863

Sphaerosyllis erinaceus Pettibone, 1954, p. 255, fig. 28,m.

A single specimen of 20 segments, 1.5 mm. long and 0.3 mm. wide without setae.

New record: Labrador: Strait of Belle Isle, 25 fms., coral and rock; 1 specimen, Station 2.

Distribution: Widely distributed in the Arctic. Also Iceland, Denmark to English Channel and the Baltic; Labrador to Massachusetts; Bering Sea; north Japan Sea. In low water to 75.5 fathoms; sexual forms at surface.

Genus *Eusyllis* Malmgren, 1867

Eusyllis blomstrandi Malmgren, 1867

Eusyllis blomstrandi Wesenberg-Lund, 1953, p. 38.—Pettibone, 1954, p. 260, fig. 28,g-i.

Length 5.5–11 mm., width without setae 0.8–1 mm. Segments 47–52. Includes two epitokous females and a male, with 16 anterior unmodified setigers, 25–27 setigers with long capillary setae, and 5–8 posterior unmodified setigers.

New records: Labrador: Hamilton Inlet, Strait of Belle Isle, 15–30 fms., on bottoms of rock, stones, with bryozoans; 21 specimens, Stations 1, 2, 22, 26, 58.

366148—56——4

DISTRIBUTION: Widely distributed in the Arctic. Also Iceland, Ireland to Mediterranean; Labrador to Maine; Bering Sea to Washington; north Japan Sea. In low water to 444 fathoms; sexual epitokes at surface.

Family NEREIDAE

Genus *Nereis* Cuvier, 1817

Key to the subgenera and species of Nereis from Labrador and Newfoundland

1. Three notopodial ligules in anterior segments. Dorsal ligules enlarged, foliaceous, lanceolate, with dorsal cirri emerging near bases of ligules. Paragnaths present on all 8 areas of proboscis . . . . . **N. (Neanthes) virens**
   Two notopodial ligules. Paragnaths of areas I or V or both missing (*N.* (*Nereis*)) 2
2. Parapodial ligules short, thick, evenly rounded. Paragnaths of distal ring: area I (mediodorsal), 2 in tandem (rarely 1 or 3). Paragnaths of basal ring: area V (dorsomedial), 0; area VI (dorsolateral), 4 in square or cross (rarely 3 or 5); VII–VIII (ventral), several continuous rows, diminishing in size progressively posteriorly. Uniformly purplish or reddish brown, not banded . . . . . **N. (Nereis) pelagica**
   Parapodial ligules triangular to conical, gradually tapering to a broad tip. Paragnaths of distal ring: area I, 0 or 1. Paragnaths of basal ring: area V, 0; area VI, 6–10 or more in oval mass; areas VII–VIII, continuous row of larger paragnaths followed by a wide band of small subequal ones. Transversely banded reddish brown or violet . . . . . **N. (Nereis) zonata**

Nereis (*Neanthes*) *virens* Sars, 1835

Alitta virens Malmgren, 1865, p. 183; 1867, p. 56, pl. 3, fig. 19.

Nereis virens Webster and Benedict, 1884, p. 717; 1887, p. 724.—Sumner, Osburn, and Cole, 1913, p. 620.—Fauvel, 1923, p. 348, fig. 134,g-k.—Not Annenkova, 1938, p. 160.—Thorson, 1946, p. 69.—Not Berkeley and Berkeley, 1948, p. 62, fig. 92; 1954, p. 458—Not Zatsepin, 1948, p. 119, pl. 30, fig. 4.—Wesenberg-Lund, 1951, p. 42.

Neanthes virens Hartman, 1944a, pp. 335, 339.

REMARKS: The Atlantic *N. virens* differs from the closely related Pacific *N. brandti* (Malmgren) as follows: In *N. virens*, the upper ligules are large, foliaceous, lanceolate almost from the first; in *N. brandti*, the upper ligules are small, conical on anterior segments, gradually becoming larger and foliaceous in middle and posterior segments. In *N. virens*, paragnaths of areas VII–VIII (ventral) of basal ring consisting of transverse band of 3 irregular rows; that of *N. brandti* consisting of about 8 rows, with the paragnaths larger anteriorly and getting smaller posteriorly.

NEW RECORDS: NEWFOUNDLAND: Port Saunders, intertidal; 2 specimens, Station 65. EAST COAST NORTH AMERICA: Off Newfoundland, Gulf of St. Lawrence, Nova Scotia, New Brunswick, Maine,

Massachusetts, Rhode Island, Connecticut, Long Island Sound; low water to 84 fathoms, U. S. Fish Commission.

DISTRIBUTION: Iceland (rare), Norway, Denmark to North Sea and France; Newfoundland to Virginia. Mainly littoral; up to 84 fathoms. (Records of *N. virens* from the Pacific, north Japan Sea, and Siberian Arctic are the closely related *N. brandti* (Malmgren).)

Nereis (*Nereis*) *pelagica* Linné, 1758

Nereis pelagica Moore, 1909b, p. 137.—Wesenberg-Lund, 1953, p. 40.—Pettibone, 1954, p. 264, fig. 30,a,b.

NEW RECORDS: LABRADOR: Okak area, Nain, St. Lewis Inlet, Strait of Belle Isle, 4–60 fms., on bottoms of sand, rock and coral; 14 specimens, Stations 1, 2, 16, 22, 62, 72, 76.

DISTRIBUTION: Widely distributed in the Arctic. Also Iceland, Norway to Mediterranean; Hudson Bay to Long Island Sound; Bering Sea to Panamá; north Japan Sea to Japan; South Atlantic (Tristan da Cunha, Kerguelen, Magellan Straits). In low water to 609 fathoms. Variety *occidentalis* Hartman, off North Carolina, Florida, Louisiana, Texas, Puerto Rico; intertidal.

Nereis (*Nereis*) *zonata* Malmgren, 1867

Nereis zonata Wesenberg-Lund, 1953, p. 40.—Pettibone, 1954, p. 265, fig. 30,c,h,i.

NEW RECORDS: LABRADOR: Backway, east and west ends Lake Melville, Goose Bay, all in Greater Lake Melville area, 9–100 fms., on bottoms of mud and sandy mud with rocks; 37 specimens, Stations 29, 34, 36, 38, 40, 47, 55, 59, 60, 67, 78.

DISTRIBUTION: Widely distributed in the Arctic. Also Iceland, Faroes; Hudson Bay to Labrador; Bering Sea to Oregon; north Japan Sea. In low water to 439 fathoms; epitokes at surface.

Family NEPHTYIDAE

Key to the genera of Nephtyidae from Labrador

1. Branchiae involute, long, cylindrical, curved or rolled in spiral toward lateral side of body . . . . . **Aglaophamus**
   Branchiae recurved, cirriform, sickle-shaped, with convex side toward lateral side of body . . . . . **Nephtys**

Genus *Aglaophamus* Kinberg

Aglaophamus malmgreni (Théel, 1879)

Nephthys longisetosa Malmgren, 1865, p. 106, pl. 12, fig. 20; not *N. longosetosa* Oersted, 1843.

Nephthys malmgreni Théel, 1879, p. 26, pl. 1, fig. 17, pl. 2, fig. 17.—Not Moore, 1908, p. 342.—Fauvel, 1923, p. 371, fig. 145,k.—Augener, 1928, p. 702.—Annenkova, 1931, p. 203; 1937, p. 164; 1938, p. 162.—Gustafson, 1936, p. 6.—

Friedrich, 1939, p. 123.—Berkeley and Berkeley, 1944, p. 2.—Gorbunov, 1946, p. 38.—Wesenberg-Lund, 1950a, p. 22; 1950b, p. 61; 1953, p. 45.
Aglaophamus malmgreni Hartman, 1950, pp. 116, 118.

DESCRIPTION: Length 70–120 mm., width including setae 13 mm. Tentacular segment with a noto- and neuropodial setigerous lobe, with a triangular ventral cirrus; dorsal tentacular cirri lacking. Parapodia with rami well separated, acicular lobes sharply conical; preacicular lamellae rudimentary; notopodial postacicular lamellae in anterior and median regions unequally bilobed—larger upper one (about length of acicular lobe) and small ventral one; about equally bilobed in posterior region; neuropodial postacicular lamellae rounded, shorter than acicular lobes. Setae long, flowing. Dorsal cirri long, digitiform. Ventral cirri sharply conical. Branchiae begin usually on setigers 11–13 (10–15), long, cylindrical, rolled in spiral toward inside (when preserved, may extend out, with tip hooked or curled inwardly); branchiae lacking on last 14–30 segments. Proboscis with the usual 22 terminal papillae—10 pairs bifid, a single dorsal and ventral one; with 14 longitudinal rows of subterminal papillae (with some additional scattered papillae more distally, 17–20 papillae per row (10–13 in Fauvel, 1923), decreasing in size basally; without an unpaired dorsal papilla. Color in alcohol: Deep reddish brown to buff.

NEW RECORDS: LABRADOR: East end, middle, and west end Lake Melville, Goose Bay, Terrington Basin; all in Greater Lake Melville area, 8–80 fathoms, on mud bottom; 38 specimens, Stations 29, 39, 53, 57, 60, 63.

DISTRIBUTION: Widely distributed in the Arctic: Siberian and western Canadian Arctic, Davis Strait, Greenland, Spitsbergen, Norway, Franz Josef Land, Barent Sea, Novaya Zemlya, Kara Sea, Siberian Arctic, Laptev Sea. Also south to Portugal and the Mediterranean, Gulf of St. Lawrence, Bering Sea, north Japan Sea. In 3 to 4,001 fathoms.

Genus *Nephtys* Cuvier, 1817

Nephtys longosetosa Oersted, 1843

Nephtys longosetosa Pettibone, 1954, p. 268, fig. 30,l.

NEW RECORD: LABRADOR: Hebron Fjord, 8 fms., sandy (1 station, 14 specimens); Station 27.

DISTRIBUTION: Widely distributed in the Arctic. Also south to France, Maine, Lower California and Panamá, north Japan Sea; Straits of Magellan. In low water to 528 fathoms.

Nephtys ciliata (Müller, 1789)

Nephthys caeca Moore, 1909b, p. 137; not *Nereis caeca* Fabricius, 1780.
Nephthys ciliata Monro, 1939, p. 346.—Wesenberg-Lund, 1953, p. 43.
Nephtys ciliata Pettibone, 1954, p. 270, fig. 30,n.

New records: Labrador: Hebron Fjord, Davis Inlet, Kaipokok Inlet, Hamilton Inlet, Backway, and west end Lake Melville, Strait of Belle Isle, 6 to 95 fms., on bottoms of mud, silt, rubble, muddy sand, rocks, pebbles with sand; 28 specimens, Stations 7, 11, 17, 18, 20, 24, 43, 48, 54, 67.

Distribution: Widely distributed in the Arctic. Also south to France, Massachusetts, southern California, Japan and China. In low water to 500 fathoms.

Family Sphaerodoridae

Prostomium indistinct, covered with papillae. Eyes 2 or 4, under integument. Integument covered with small papillae and number of large spherical capsules. Parapodia uniramous, covered with papillae. Proboscis unarmed, globular.

Genus *Ephesia* Rathke, 1843

Ephesia gracilis Rathke, 1843

Ephesia gracilis Rathke, 1843, p. 176, pl. 7, figs. 5–8.—Webster and Benedict, 1887, p. 728.—Fauvel, 1923, p. 377, fig. 148,a–f.—Augener, 1928, p. 736.—Berkeley and Berkeley, 1944, p. 2.—Annenkova, 1937, p. 165; 1938, p. 163.—Gorbunov, 1946, p. 38.—Zatsepin, 1948, p. 122.—Wesenberg-Lund, 1950a, p. 22; 1950b, p. 63; 1951, p. 48; 1953, p. 46.

Sphaeordorum papillifer Moore, 1909a, p. 333, pl. 15, figs. 11, 12.

Ephesia papillifer Berkeley and Berkeley, 1948, p. 27.

Description: Body elongated, filiform, about 120 segments. Spherical capsules in two dorsolateral longitudinal rows; capsules with short terminal processes. Eyes 4. Setae simple.

New records: Labrador: East end Lake Melville, 65–100 fms., sandy mud, some rock; 1 specimen, Station 36. Canadian Arctic: Baffin Island, 66°43′ N., 80°07′ W., 1927., R. A. Bartlett. Northwest Greenland: 1 mile northwest of Conical Rock, 1940, R. A. Bartlett.

Distribution: Widely distributed in the Arctic: Canadian Arctic, Greenland, Spitsbergen, Novaya Zemlya, Kara Sea, Siberian Arctic. Also Iceland, Norwegian coast to France, Mediterranean; Labrador to Maine; Bering Sea to southern California; north Japan Sea; Antarctic. In 25 to 723 fathoms.

Family Onuphidae

Prostomium with 2 globular ventral palps, 7 antennae—2 frontal, ovoid, and 5 occipital with more or less ringed ceratophores. Anterior parapodia more or less modified. Pharynx with a labrum and 3–5 pairs of jaws and an unpaired piece. Tentacular segment achaetous and apodous.

Genus *Nothria* Malmgren, 1867

Tentacular segment with two short tentacular cirri. Branchiae simple, cirriform.

Nothria conchylega (Sars, 1835)

Onuphis conchylega Sars, 1835, p. 61, pl. 10, fig. 28,a–e.—Chamberlin, 1920, p. 15.—Fauvel, 1923, p. 415, fig. 164,a–m.—Treadwell, 1937, p. 31.—Annenkova, 1937, p. 166; 1938, p. 166.—Berkeley and Berkeley, 1944, p. 3; 1948, p. 91, figs. 136–138.—Gorbunov, 1946, p. 39.—Zatsepin, 1948, p. 124, pl. 31, fig. 16.—Wesenberg-Lund, 1950a, p. 26; 1950b, p. 67; 1951, p. 53; 1953, p. 49.

Nothria conchylega Malmgren, 1867, p. 66.—Moore, 1909a, p. 138.—Hartman, 1944a, pp. 335, 340, not pl. 23, fig. 4; 1944b, p. 85, pl. 5, figs. 105–112, pl. 17, figs. 337, 338; 1945, p. 24.

Description: Branchiae begin on setigers 10–20. Anterior parapodia with presetal lamellar process and large amber-colored unidentate hooks. Without compound spinigerous setae. Tube free, greatly flattened, parchmentlike base covered with flat shell fragments and pebbles.

New records: Labrador: Strait of Belle Isle, on bottom of coral and rock, 25 fms.; 1 specimen, Station 2. East Coast North America: Off Newfoundland, Nova Scotia, Maine, Massachusetts, Rhode Island, Delaware Bay, 18 to 430 fms., U. S. Fish Commission (Verrill, identified). West Greenland: Upernavik Harbor, 13 fms., and off Hare Island, 70°20′ N., 56° W., 90 fms., 1884, U. S. S. *Alert*. Bering Sea: *Albatross* Station 3548, 54°44′ N., 165°42′ W., 91 fms., 1893.

Distribution: Widely distributed in the Arctic: Siberian and Canadian Arctic, Davis Strait, Greenland, Jan Mayen, Spitsbergen, Novaya Zemlya, Kara Sea. Also Iceland, Faroes, Norway to France and Mediterranean; Labrador to Florida and West Indies; Bering Sea to British Columbia; north Japan Sea to Japan. In low water to 954 fathoms.

Family Lumbrineridae

Genus *Lumbrineris* Blainville, 1828

Lumbrineris fragilis (Müller, 1776)

Lumbrineris fragilis Moore, 1909b, p. 138.—Pettibone, 1954. p. 275, fig. 31,h–n.
Lumbrineris hebes Moore, 1909b, p. 138; not *L. hebes* Verrill, 1879.
Lumbrinereis fragilis Treadwell, 1937, p. 31.
Lumbriconereis fragilis Wesenberg-Lund, 1953, p. 51.

New records: Labrador: Hebron Fjord, Hamilton Inlet, St. Lewis Inlet, 5–13 fms., on various combinations of mud, sand, sand-

stone, pebbles, rocks, shells, much detritus; 6 specimens, Stations 18, 23, 45.

DISTRIBUTION: Widely distributed in the Arctic. Also Iceland, Faroes, Norway to Azores and Mediterranean; Hudson Bay to Rhode Island; Bering Sea; north Japan Sea. In low water to 1,883 fathoms.

Family SPIONIDAE

Both genera represented have setiger 5 not modified, prostomium without frontal horns, with more than one pair of branchiae beginning on setiger 2, and with anal cirri.

Key to the genera of Spionidae from Labrador

1. Branchiae present on only few anterior segments, 3–11 pairs, often pinnate. With hooded crotchets in both noto- and neuropodia . . . . . **Prionospio**
   Branchiae more than 11 pairs, not pinnate. Without hooded crotchets in notopodia of posterior segments . . . . . **Laonice**

Genus *Prionospio* Malmgren, 1867

Prionospio malmgreni Claparède, 1868

Prionospio malmgreni Pettibone, 1954, p. 282, fig. 32,i–k.

NEW RECORDS: LABRADOR: Hebron Fjord, St. Lewis Inlet, 40–100 fms., mud; 2 specimens, Stations 5, 74.

DISTRIBUTION: Arctic Alaska to Washington; north Japan Sea; Iceland, Norway to Mediterranean; Labrador to Massachusetts; South Africa. In low water to 250 fathoms; surface.

Genus *Laonice* Malmgren, 1867

Laonice cirrata (Sars, 1851)

Nerine cirrata Sars, 1851, p. 207.
Scolecolepis cirrata Malmgren, 1867, p. 91, pl. 9, fig. 54.
Scololepis cirrata Verrill, 1881, pp. 298, 301, 304, 309, 312, 316.
Spionides foliata Moore, 1923, p. 182.
Spionides sacculata Moore, 1923, p. 184.
Laonice cirrata Fauvel, 1927, p. 38, fig. 12,a–e.—Annenkova, 1937, p. 169; 1938, p. 172.—Gorbunov, 1946, p. 38.—Zatsepin, 1948, p. 132, pl. 32, fig. 12.—Hartman, 1948, p. 36.—Hartman and Reish, 1950, p. 28.—Wesenberg-Lund, 1950a, p. 30; 1950b, p. 75; 1951, p. 68, fig. 6; 1953, p. 56. Berkeley and Berkeley, 1952, p. 26, figs. 49–51.

DESCRIPTION: Prostomium enlarged and rounded anteriorly, with two eyes and an occipital antenna, with a dorsal crest extending back about 30 segments. Branchiae cirriform, well separated from the

dorsal lamellae, folded back on dorsum, present on anterior 28–60 segments. With genital or interramal pouches in which eggs may be present, formed by union of ventral lamellae, beginning on segments 25–50. Anus encircled by 8–14 cirri.

NEW RECORDS: LABRADOR: Hamilton Inlet, 30 fms., mud, stones; 1 specimen, Station 43. WEST COAST NORTH AMERICA: Washington and Puget Sounds, Washington, 10–165 fms., on bottoms of mud, rocks, mud with sand and kelp, M. H. Pettibone. EAST COAST NORTH AMERICA: Off Maine, Massachusetts, 22–68 fms., U. S. Fish Commission (by Verrill as *Scolecolepis cirrata*).

DISTRIBUTION: Widely distributed in the Arctic: Davis Strait, Greenland, Spitsbergen, Novaya Zemlya, Kara Sea, Siberian Arctic. Also Iceland, Faroes, Norway to English Channel and Mediterranean; Labrador to Massachusetts; Alaska to southern California; north Japan Sea to Japan. In 5 to 891 fathoms.

Family CIRRATULIDAE

Genus *Cirratulus* Lamark, 1801

Cirratulus cirratus (Müller, 1776)

Cirratulus cirratus Moore, 1909b, p. 139.—Wesenberg-Lund, 1953, p. 61.—Pettibone, 1954, p. 286, fig. 33,a–c.

NEW RECORD: LABRADOR: Hebron Fjord, 95 fms., mud; 1 specimen, Station 11.

DISTRIBUTION: Widely distributed in the Arctic. Also Iceland, Norway to France, Canary Islands; Hudson Bay to Massachusetts; Bering Sea to México; north Japan Sea to Japan, Manchuria; Falkland Islands, Magellan Straits, South Georgia, Kerguelen. In low water to 1,611 fathoms.

Genus *Chaetozone* Malmgren, 1867

Chaetozone setosa Malmgren, 1867

Chaetozone setosa Moore, 1909b, p. 139.—Wesenberg-Lund, 1953, p. 61.—Pettibone, 1954, p. 287, fig. 33,d.

NEW RECORDS: LABRADOR: Hebron Fjord, 95–125 fms., mud, in empty tubes of *Pectinaria* filled with soft mud; 46 specimens, Stations 11, 12.

DISTRIBUTION: Widely distributed in the Arctic. Also Iceland, Norway to Canary Islands, Mediterranean, Adriatic, Gulf of Aden; Labrador to Massachusetts; Bering Sea to British Columbia; north Japan Sea; Falkland Islands, Magellan Straits, Kerguelen. In low water to 1,333 fathoms; surface.

Family Flabelligeridae (Chloraemidae)

Key to the genera of Flabelligeridae from Labrador

1. Body covered with a thick mucous mantle containing long pedunculate papillae. Neurosetae stout compound hooks, 1–2 per lobe. Setae of the first setiger numerous, long, directed anteriorly forming a cephalic cage enclosing the branchiae, etc. . . . . **Flabelligera**
   Body without mucous mantle. Neurosetae simple or pseudocompound. Body covered with short to long papillae (rarely rugose only), papillae not pedunculate. 2
2. Setae of first setigers longer than the following, directed anteriorly forming a distinct cephalic cage . . . . . **Pherusa**
   Setae of first setigers not forming a distinct cephalic cage. . . . . **Brada**

Genus *Flabelligera* Sars, 1829

Flabelligera affinis Sars, 1829

Flabelligera affinus Moore, 1909b, p. 143.
Flabelligera affinis Pettibone, 1954, p. 289, fig. 33, e-g.

New records: Labrador: Seven Islands Bay, Okak area, Davis Inlet, 10–30 fms., on bottoms of rubble and mud with rocks and stones; 5 specimens, Stations 20, 30, 31, 77.

Distribution: Widely distributed in the Arctic. Also Iceland, Norway to France, Mediterranean; Hudson Bay to Massachusetts; Bering Sea to southern California; north Japan Sea; Falkland Islands, Magellan Straits, South Georgia, South Africa, Australia. In low water to 889 fathoms; surface.

Genus *Pherusa* Oken, 1807

Pherusa plumosa (Müller, 1776)

Amphitrite plumosa Müller, 1776, p. 216.
Siphonostomum asperum Stimpson, 1854, p. 31.
Trophonia plumosa Malmgren, 1867, p. 82.—Verrill, 1881, pp. 293, 294, 295, 299.—Webster and Benedict, 1887, p. 729.
Trophonia aspera Verrill, 1881, pp. 289, 295, 298, 304, 308, 312, 314.—Webster and Benedict, 1887, p. 730.—Moore, 1909b, p. 143.
Trophonia papillata Johnson, 1901, p. 416, pl. 12, figs. 122–123.
Stylarioides plumosa Eliason, 1920, p. 61.—Fauvel, 1927, p. 116, fig. 41,a-g; 1933, p. 48.—Okuda, 1937, p. 52, pl. 2, fig. c.—Annenkova, 1937, p. 175; 1938, p. 184.—Hartman, 1944c, p. 22.—Gorbunov, 1946, p. 39.—Zatsepin, 1948, p. 135, pl. 33, fig. 2.—Wesenberg-Lund, 1949, p. 334; 1950a, p. 35; 1950b, p. 83; 1951, p. 77; 1953, p. 65.—Berkeley and Berkeley, 1952, p. 9, fig. 7.
Stylarioides papillata Moore, 1923, p. 221.—Hartman, 1948, p. 40.—Hartman and Reish, 1950, p. 35.—Berkeley and Berkeley, 1952, p. 8.
Pherusa plumosa Støp-Bowitz, 1948a, p. 13, fig. 2; 1948b. p. 33.

Description: Body round, slightly flattened ventrally, inflated and abruptly attenuated posteriorly, up to 70 segments. Body covered

with elongated, cylindrical or capitate papillae agglutinated with mud and sand. Noto- and neurosetae on first three setigers capillary, ringed, iridescent, longer than the following, directed forward forming a cephalic cage. Neurosetae, beginning on setiger 4, hooked sigmoid crotchets of variable form; notosetae capillary.

NEW RECORDS: LABRADOR: Hebron Fjord, Strait of Belle Isle, 8–13 fms., soft mud, and sand with rocks, pebbles; 5 specimens, Stations 17, 18. EAST COAST NORTH AMERICA: Off Nova Scotia, Maine, Massachusetts, 18–96 fms., U. S. Fish Commission (by Verrill as *Trophonia aspera*). CANADIAN ARCTIC: Kneeland Bay in Frobischer Bay, Baffin Island, 17 fms., 1942, R. A. Bartlett. NORTHWEST GREENLAND: 1 mile northwest of Conical Rock, 25–60 fms., 1940, R. A. Bartlett. WEST COAST NORTH AMERICA: *Albatross* Station 2845, Alaska Peninsula, 54°05′ N., 164°09′ W., 42 fms., 1888; Strait of Juan de Fuca, Washington and Puget Sounds, Washington, low water to 105 fms., M. H. Pettibone.

DISTRIBUTION: Widely distributed in the Arctic: Siberian and Canadian Arctic, Greenland, Spitsbergen, Barents Sea, Novaya Zemlya, Kara Sea. Also Iceland, Faroes, Norway to France, Adriatic, Iranian Gulf; Labrador to Massachusetts; West Indies, Venezuela; Alaska to Columbia; Okhotsk Sea to Japan, China. In low water to 1,611 fathoms.

Genus *Brada* Stimpson, 1854

Key to the species of Brada from Labrador

1. Notosetae well developed. Body covered with elongated cylindrical papillae encrusted with sand. Long fusiform papillae around the setal bundles **B. villosa**

   Notosetae poorly developed, few or absent 2

2. Papillae very small, globular or cup-shaped, covered with thin layer of sand **B. inhabilis**

   Papillae scattered, elongated, conical or cylindrical with small tip, covered by entire layer of sand (necessary to remove sand to see shape of papillae) **B. granosa**

Brada villosa (Rathke, 1843)

Brada villosa Wesenberg-Lund, 1953, p. 67.—Pettibone, 1954, p. 290.

NEW RECORD: LABRADOR: Backway, Greater Lake Melville area, 15–16 fms.; 1 specimen, Station 67.

DISTRIBUTION: Widely distributed in the Arctic. Also Iceland, Norway to Spain, Mediterranean, Adriatic, south Arabian coast; Hudson Bay to Rhode Island; Bering Sea to southern California; north Japan Sea to Japan; South Orkney and South Shetland Islands. In low water to 853 fathoms.

***Brada inhabilis* (Rathke, 1843)**

Brada inhabilis Wesenberg-Lund 1953, p. 67.—Pettibone, 1954, p. 292, fig. 33,h.

NEW RECORD: Labrador: Hebron Fjord, 95 fms., mud; 1 specimen, Station 11.

DISTRIBUTION: Widely distributed in the Arctic. Also Iceland, Norway to Danish waters; Labrador to Maine; Bering Sea to Gulf of Alaska; north Japan Sea. In low water to 609 fathoms.

***Brada granosa* Stimpson, 1854**

Brada granosa Stimpson, 1854, p. 32, pl. 2, fig. 22.—Verrill, 1881, pp. 289, 308.—Webster and Benedict, 1887, p. 732, pl. 5, figs. 72–76.—Not Treadwell, 1937, p. 32 (=*B. inhabilis*).

Brada granulosa Hansen, 1882, p. 39, pl. 7, figs. 21–22.—Støp-Bowitz, 1948a, p. 47, fig. 13; 1948b, p. 46, fig. 18.—Wesenberg-Lund, 1951, p. 80.

Brada granulata Moore, 1909b, p. 143; not *B. granulata* Malmgren, 1867.

Brada inhabilis Annenkova, 1937, p. 176; 1938, p. 185.—Gorbunov, 1946, p. 39.—Zatsepin, 1948, p. 136; not *Siphonostoma inhabilis* Rathke, 1843.

NEW RECORDS: LABRADOR: Hebron Fjord, 95 fms., mud; 13 specimens, Station 11. EAST COAST NORTH AMERICA: Bay of Fundy, off Maine, Massachusetts, 18 to 253 fms., U. S. Fish Commission (identified by Verrill). WEST COAST NORTH AMERICA: Iliuliuk Harbor, Unalaska, 1871, and New Harbor, Unga Island, 1872, W. H. Dall.

DISTRIBUTION: Scattered records in the Arctic: Siberian Arctic, Spitsbergen. Also Iceland, Norway; Labrador to Massachusetts; southwestern Alaska; north Japan Sea. In 3 to 253 fathoms.

Family SCALIBREGMIDAE

Key to the genera of Scalibregmidae from Labrador and Nova Scotia

1. Body inflated anteriorly, abruptly attenuated on posterior half. Prostomium T-shaped, with frontal horns. Posterior parapodia with digitiform dorsal and ventral cirri (begin on setigers 16–18). Annuli 4 per segment. Pygidium with 4–5 filiform anal cirri . . . . . **Scalibregma**

   Body short, fusiform. Prostomium bilobed, without frontal horns. Parapodia without dorsal and ventral cirri. Annuli 2 per segment. Pygidium without anal cirri . . . . . **Polyphysia**

Genus *Scalibregma* Rathke, 1843

***Scalibregma inflatum* Rathke, 1843**

Scalibregma inflatum not Moore, 1909b, p. 143 (=*Polyphysia crassa*).—Wesenberg-Lund, 1953, p. 68.—Pettibone, 1954, p. 293, fig. 33,i-k.

NEW RECORDS: LABRADOR: Middle and west end Lake Melville, 17–35 fms., on bottoms of mud; 3 specimens, Stations 28, 55.

DISTRIBUTION: Widely distributed in the Arctic. Also Iceland, Norway to France, Adriatic, Gulf of Oman; Labrador to Long Island Sound; Bering Sea to central California; north Japan Sea to Japan; New Zealand, Magellan Straits, South Georgia, Prince Edward Islands, Kerguelen. In low water to 1,333 fathoms; epitokes at surface.

Genus *Polyphysia* Quatrefages, 1865

Polyphysia crassa (Oersted, 1843)

Eumenia crassa Verrill, 1881, pp. 298, 304, 311.—Fauvel, 1927, p. 127, fig. 45,i–k.—Zatsepin, 1948, p. 136, pl. 33, fig. 9.—Wesenberg-Lund, 1950a, p. 37; 1950b, p. 88; 1951, p. 81; 1953, p. 71.

Scalibregma inflatum Moore, 1909b, p. 143; not *S. inflatum* Rathke, 1843.

Polyphysia crassa Støp-Bowitz, 1946a, p. 75, figs. 4–6; 1948b, p. 29, fig. 10.

DESCRIPTION: Branchiae 4 pairs (or 6?), arborescent, on setigers 2–5, first ones smaller, last ones larger (young without branchiae or small single lobes).

NEW RECORDS: EAST COAST NORTH AMERICA: Off Nova Scotia, Maine, Massachusetts, 56–110 fms., U. S. Fish Commission (identified by Verrill).

DISTRIBUTION: Widely distributed in the Arctic: Siberian Arctic, Greenland, Spitsbergen, Novaya Zemlya, Kara Sea. Also Iceland, Norway to England, Mediterranean; Gulf of St. Lawrence to Massachusetts. In 47 to 1,254 fathoms.

Family OPHELIIDAE

Key to the genera of Opheliidae from Labrador

1. Body rounded, cylindrical, grub-shaped, without ventral groove. Pygidium small, cylindrical, longitudinally furrowed. With paired lateral cirriform branchiae . . . . . **Travisia**

   Body rounded anteriorly on anterior half or third, with a deep ventral and two lateral grooves on posterior part. Pygidium with papillae—2 larger ventral ones and a dorsolateral circlet of smaller ones. With paired lateral straplike branchiae (except on first 8–11 and few terminal segments). **Ophelia**

Genus *Travisia* Johnston, 1840

Travisia forbesii Johnston, 1840

Travisia forbesii Malmgren, 1867, p. 75.—Not Murdoch, 1885, p. 154 (= *Travisia carnea*).—Chamberlin, 1920, p. 20.—Fauvel, 1927, p. 138, fig. 48,g–k.—Annenkova, 1938, p. 188.—Berkeley and Berkeley, 1942, p. 198.—Støp-Bowitz, 1946b, p. 26, fig. 1; 1948b, p. 10, fig. 2.—Zatsepin, 1948, p. 137, pl. 33, fig. 6.—Wesenberg-Lund, 1950a, p. 38; 1950b, p. 90; 1951, p. 82; 1953, p. 71.

DESCRIPTION: Segments 23–26. With conspicuous lateral lobes on two fleshy eminences on each side of posterior 9–11 segments, up to last segment (only one posterior segment without).

New records: Labrador: Strait of Belle Isle, 15–20 fms., sand; 2 specimens, Station 15. West Coast North America: Washington Sound, low water, M. H. Pettibone; Chichagof Harbor, Attu Island, gravel and mud, 1873, and Chiachi Islands, Alaska, 20 fms., mud, 1874, W. H. Dall; Karluk, Alaska, Alaska Salmon Investigation, 1903.

Distribution: Widely distributed in the Arctic: Siberian, Alaskan, and Canadian Arctic, Davis Strait, Greenland, Jan Mayen, Spitsbergen, Novaya Zemlya, Kara Sea. Also Iceland, Faroes, Norway to France; Labrador to Maine; South Africa; Bering Sea to Washington Sound; north Japan Sea. In low water to 1,501 fathoms.

Genus *Ophelia* Savigny, 1822

Ophelia limacina (Rathke, 1843)

Ammotrypane limacina Rathke, 1843, pp. 190, 202, pl. 10, figs. 4–8.

Ophelia limacina Verrill, 1881, pp. 289, 316, 319.—Not Webster and Benedict, 1884, p. 724 (=*O. bicornis*).—Fauvel, 1927, p. 132, fig. 46,i–l.—Treadwell, 1937, p. 32.—Annenkova, 1937, p. 177; 1938, p. 187.—Hartman, 1938, p. 107, figs. 55–58; not 1942b, p. 130 (=*O. denticulata*).—Berkeley and Berkeley, 1943, p. 130.—Støp-Bowitz, 1946b, p. 32, fig. 2; 1948b, p. 12, fig. 3.—Zatsepin, 1948, p. 137, pl. 33, fig. 5.—Wesenberg-Lund, 1950a, p. 37; 1950b, p. 88; 1951, p. 83.—Tebble, 1952, p. 561, fig. 4; 1953, pp. 362, 365.

Ophelia borealis Tebble, 1952, p. 553, figs. 1–3; 1953, pp. 362, 365.—Berkeley and Berkeley, 1954, p. 467.

Ophelia assimilis Tebble, 1953, p. 367.

Description: The two specimens from Labrador are 29–33 mm. long, 3.5–4 mm. wide, consisting of 33 setigerous segments: 10 prebranchial, 16 branchial, and 7 postbranchial. Ventral groove begins on setiger 7. The dorsolateral circlet of anal papillae are rather long, the setae of the posterior segments are long, extending well beyond the posterior end of the body. The paired dorsolateral longitudinal ridges on the posterior five segments (setigers 29–33) are prominent.

Remarks: Tebble (1952) has attempted to distinguish between *Ophelia borealis* Quatrefages (10 prebranchial setigers, typically 20 (16–20) branchial setigers, 6 (6–10) postbranchial setigers, 36 (34–36) total number of setigers, with dorsolateral circlet of anal papillae long and thin, and with setae of posterior segments long, concealing the anal segment) and *O. limacina* (10 prebranchial setigers, typically 22 (18–23) branchial setigers, 7 (6–10) postbranchial setigers, 39 (38–39) total number of setigers, with dorsolateral circlet of anal papillae short and blunt, and setae of posterior segments short). In the material examined by Tebble, the two groups could be separated and there were no intergradations. However in the material examined in the U. S. National Museum from Greenland, Canadian Arctic, Arctic Alaska, Labrador, Washington, Oregon, and central California there were all gradations from the typical *O.*

limacina to the typical *O. borealis*, as defined by Tebble, in the number of branchial, postbranchial, and total number of segments. The specimens from Labrador (16 branchial, 7 postbranchial, and 33 total setigers) and *O. assimilis* Tebble, 1953, from central California (19 branchial, 4 postbranchial, and 33 total setigers) appear to fall in place in the variable series. The dorsolateral anal papillae vary from short, rounded to longer, digitiform depending on the degree of contraction (indicated also by Hartman, 1938d, p. 107).

TABLE 3.—*Summary of observations on* Ophelia limacina (*Rathke*)

Geographic location	Prebranchial setigerous segments	Branchial setigerous segments	Postbranchial setigerous segments	Total number setigerous segments	Dorsolateral circlet anal papillae	Anal setae
Canadian Arctic	10	24	6	40	Short to rather long.	Short to long.
Greenland	10	22	7	39	Short	Short.
Central California	10	23	6	39	Long	Long.
Typical *O. limacina* according to Tebble, 1952.	10	22 (18–23)	7 (6–10)	39 (38–39)	Short, blunt	Short.
Canadian Arctic	10	22	6	38	Short	Short.
Arctic Alaska, Washington	10	21	6	37	Long	Long.
Oregon	10	20	6	36	Medium long	Short to long.
Typical *O. borealis* according to Tebble, 1952, British waters, Atlantic.	10	20 (16–20)	6 (6–10)	36 (34–36)	Long, thin	Long.
Labrador	10	16	7	33	Long	Long.
O. assimilis Central California.	10	19	4	33	Short	(?).
Range for material examined	10	16–24	6–7	33–40	Short to long	Short to long.
Range for *O. limacina* (incl. *O. borealis*, *O. assimilis*).	10	16–24	4–7	33–40	Short to long	Short to long.

The setae of the posterior segments may be short (broken off?) to long. The observations are summarized in table 3. Thus I could not follow Tebble in considering *O. borealis* and *O. assimilis* valid species. The range for the material examined is 10 prebranchial, 16–24 branchial, 6–7 postbranchial, and 33–40 total setigers, with the dorsolateral anal papillae and setae of posterior segments short to long.

Ophelia denticulata Verrill, 1875 (type in USNM) should not be referred to *O. limacina* (Hartman, 1942b, p. 130). They may be distinguished as follows: in *O. denticulata* the deep ventral groove begins on setigers 9–10, in *O. limacina* it begins on setiger 7; in *O. denticulata* there are 9 prebranchial setigers instead of 10 as in *O. limacina;* in *O. denticulata* paired dorsal longitudinal ridges on posterior few segments are absent, present in *O. limacina*.

NEW RECORDS: LABRADOR: Strait of Belle Isle, 15–20 fms., sand; 2 specimens, Station 15. WEST GREENLAND: Off Conical Rock, 20–40 fms., 1938; 1 mile northwest of Conical Rock, 1940; west side

Wolstemholm Island, 1940—all by R. A. Bartlett; Upernivik Harbor, 13 fms., 1884, U. S. S. *Alert*. West Coast North America: Chichagof Harbor, Attu Island, 5–7 fms., gravel and sand, 1873, W. H. Dall; *Albatross* Station 2879, off Washington, 48°53′ N., 125°53′ W., 34 fms., 1888; 5 miles off Moclips, Wash., 20 fms., 1940, and 7 miles south Cape Arago, Oreg., 32–35 fms., shale and coral, 1939, M. H. Pettibone; *Albatross* Station 4453, Monterey Bay, Calif., 49 fms., 1904.

Distribution: Widely distributed in the Arctic: Siberian, Alaskan and Canadian Arctic, Davis Strait, Greenland, Spitsbergen, Barents Sea, Novaya Zemlya, Kara Sea. Also Iceland, Faroes, Norway to English Channel; Hudson Bay to Grand Manan; Alaska to southern California; north Japan Sea to Japan. In low water to 250 fathoms.

Family Capitellidae

Genus *Capitella* Blainville, 1828

Capitella capitata (*Fabricius, 1780*)

Capitella capitata Wesenberg-Lund, 1953, p. 74.—Berkeley and Berkeley, 1954, p. 465.—Pettibone, 1954, p. 298, fig. 33,r-u.

New record: Labrador: Hamilton Inlet, 6 fms., muddy, sandy; 4 specimens, Station 24.

Distribution: Widely distributed in the Arctic. Also Iceland, Norway to France, Mediterranean, Black Sea; Hudson Bay to North Carolina, Texas; Bering Sea to southern California; north Japan Sea; Magellan Straits, South Georgia, Bouvet Island, South Africa, Kerguelen. In low water to 500 fathoms.

Family Maldanidae

Genus *Praxillella* Verrill, 1881

Praxillella praetermissa (Malmgren, 1865)

Praxillella praetermissa Moore, 1909b, p. 142.—Wesenberg-Lund, 1953, p. 82.—Pettibone, 1954, p. 303, fig. 34,b-f.

New records: Labrador: Okak area, Hamilton Inlet, Strait of Belle Isle, 5–8 fms., on bottoms of mud, sand, mud and rock with much detritus; 6 specimens, Stations 17, 23, 73.

Distribution: Widely distributed in the Arctic. Also Iceland, Faroes to English Channel, Mediterranean; Labrador to Massachusetts; north Japan Sea. In 7 to 1,111 fathoms.

Genus *Maldane* Grube, 1860

Maldane sarsi Malmgren, 1865

Maldane sarsi Moore, 1909b, p. 142.—Wesenberg-Lund, 1953, p. 84.—Pettibone, 1954, p. 303, fig. 34,g,h.

NEW RECORD: LABRADOR: Seven Islands Bay, 30 fms., mud with rock; 2 specimens, Station 31.

DISTRIBUTION: Widely distributed in the Arctic. Also Iceland, Norway to France; Labrador to Rhode Island, Louisiana, Mississippi, Texas; Bering Sea to southern California; north Japan Sea to Japan; south Arabian coast, Bay of Bengal, South Georgia, South Shetlands, Palmer Archipelago, south Australia. In low water to 1,771 fathoms.

Genus *Nicomache* Malmgren, 1865

Nicomache lumbricalis (Fabricius, 1780)

Nicomache lumbricalis Wesenberg-Lund, 1953, p. 79.—Pettibone, 1954, p. 305, fig. 34,i,j.

NEW RECORDS: LABRADOR: Seven Islands Bay, Hebron Fjord, west end Lake Melville, 30–125 fms., mud, and mud with rock; 9 specimens, Stations 12, 14, 31, 37, 57.

DISTRIBUTION: Widely distributed in the Arctic. Also Iceland, Norway to English Channel, Santander; Labrador to Massachusetts; South Africa; Bering Sea to Lower California; north Japan Sea. In low water to 1,400 fathoms.

Family PECTINARIIDAE (AMPHICTENIDAE)

Genus *Pectinaria* Lamark, 1818

Subgenus *Cistenides* Malmgren, 1865

Pectinaria (*Cistenides*) *hyperborea* (Malmgren, 1865)

Cistenides hyperborea Wesenberg-Lund, 1953, p. 89.
Pectinaria (*Cistenides*) *hyperborea* Moore, 1909b, p. 140.—Pettibone, 1954, p. 314, fig. 35,c-h.

NEW RECORDS: LABRADOR: Seven Islands Bay, Hebron Fjord, Nain area, Hamilton Inlet, St. Lewis Inlet, Strait of Belle Isle, 8–125 fms., on bottoms of mud, sand, stones, and various combinations of mud, stones, rocks, shells; 304 specimens, Stations 5, 10–14, 17, 27, 31, 33, 41, 45, 49, 50, 56, 74.

DISTRIBUTION: Widely distributed in the Arctic. Also Iceland, Norway to Danish waters, North Sea; Labrador to Massachusetts; Bering Sea to Alaska; north Japan Sea to Japan. In 1.5 to 379 fathoms.

Pectinaria (*Cistenides*) *granulata* (Linné, 1767)

Cistenides granulata Wesenberg-Lund, 1953, p. 88.
Pectinaria (*Cistenides*) *granulata* Pettibone, 1954, p. 312, fig. 35,i-k.

NEW RECORDS: LABRADOR: Davis Inlet, Ironbound Islands, Hamilton Inlet, west end Lake Melville, 4–12 fms., on bottoms of mud,

sandy mud, mud with rock, rubble; 10 specimens, Stations 20, 47, 48, 52, 69.

DISTRIBUTION: Widely distributed in the Arctic. Also Iceland, Faroes to Great Britain; Labrador to Long Island Sound; Bering Sea to western México; north Japan Sea. In low water to 190 fathoms.

Family AMPHARETIDAE

Key to the genera of Ampharetidae from Labrador

1. With a pair of large, recurved, dorsal hooked setae behind the branchiae. Branchiae 8. Without paleae. Thoracic setigers 16 (first 2 may be small). **Melinna**
   Without pair of dorsal hooked setae posterior to branchiae 2
2. With well developed bundles of golden setae (paleae) on each side, anterior to branchiae. Branchiae 8. Thoracic setigers 14. Uncinigerous pinnules begin on setiger 3 . . . . . **Ampharete**
   Without paleae or paleae poorly developed (smaller and more delicate than notosetae, easily overlooked) 3
3. Uncinigerous pinnules begin on setiger 3. Branchiae 8. Thoracic setigers 13. Paleae very reduced or absent . . . . . **Sabellides**
   Uncinigerous pinnules begin on setiger 4 4
4. Branchiae 8. Without paleae or paleae very small and delicate. Thoracic setigers 16 (first small, easily overlooked) . . . . . **Lysippe**
   Branchiae 6. Without paleae. Thoracic setigers 17 (first very small, easily overlooked) . . . . . **Samytha**

Genus *Melinna* Malmgren, 1865

Melinna cristata (Sars, 1851)

Sabellides cristata Sars, 1851, p. 205.

Melinna cristata Malmgren, 1865, p. 371, pl. 20, fig. 50.—Verrill, 1881, pp. 298, 302, 305, 309, 312.—Webster and Benedict, 1884, p. 732; 1887, p. 748.—Moore, 1908, p. 349.—Fauvel, 1927, p. 237, fig. 83,i–n; 1933, p. 53.—Annenkova, 1937, p. 186; 1938, p. 199.—Zatsepin, 1948, p. 149, pl. 37, fig. 6.—Hartman and Reish, 1950, p. 42.—Wesenberg-Lund, 1950a, p. 49; 1950b, p. 114; 1951, p. 105; 1953, p. 93.—Berkeley and Berkeley, 1952, p. 70, figs. 143–145.

Melinna cristata heterodonta Moore, 1923, p. 212, pl. 17, fig. 25.

DESCRIPTION: Branchiae 8, united by a palmar membrane of variable height. Anterior few segments coalesced, forming a collarette ventrally, with sides elevated in a lateral crest, and with a transverse dorsal fimbriated thoracic membrane (10–20 teeth). Abdominal region long, tapered posteriorly, about 50 segments. Pygidium without cirri. Tube of mud with few small pebbles.

NEW RECORDS: LABRADOR: Hamilton Inlet, 5–6 fms., sand, mud, rock, much detritus; 1 specimen, Station 23. EAST COAST NORTH AMERICA: Off Nova Scotia, Maine, Massachusetts, 6–374 fms., U. S. Fish Commission (identified by Verrill).

DISTRIBUTION: Widely distributed in the Arctic: Siberian Arctic, Greenland, Jan Mayen, Spitsbergen, Barents Sea, Novaya Zemlya, Kara Sea. Also Iceland, Faroes, Scandinavia to France; Hudson Bay to Massachusetts; Alaska to southern California; north Japan Sea, Manchuria; Antarctic. In 4 to 2,228 fathoms.

Genus *Ampharete* Malmgren, 1865

Key to the species of Ampharete from Labrador

1. Paleae slender, taper gradually. Anal cirri numerous. Tube membranous plus soft gray debris . . . . . **A. acutifrons**
   Paleae stouter, taper rather abruptly, with short to long acuminate tips. Anal cirri 2. Tube of stiff, smooth, compact mud . . . . . **A. arctica**

Ampharete acutifrons (Grube, 1860)

Ampharete acutifrons Wesenberg-Lund, 1953, p. 90—Pettibone, 1954, p. 316, fig. 36,b–d.

NEW RECORD: LABRADOR: Strait of Belle Isle, 8 fms., soft mud; 1 specimen, Station 17.

DISTRIBUTION: Widely distributed in the Arctic. Also Iceland, Swedish west coast to France, Mediterranean; Labrador to Maine; Bering Sea to southern California; north Japan Sea. In 1 to 1,333 fathoms.

Ampharete arctica Malmgren, 1865

Ampharete arctica Malmgren, 1865, p. 364, pl. 26, fig. 77.—Verrill, 1881, p. 312.—Moore, 1908, p. 348; 1923, p. 200.—Hessle, 1917, p. 97, fig. 9.—Augener, 1928, p. 777.—Gustafson, 1936, p. 9.—Annenkova, 1937, p. 188; 1938, p. 201.—Gorbunov, 1946, p. 39.—Zatsepin, 1948, p. 150, pl. 37, fig. 11.—Berkeley and Berkeley, 1952, p. 65, figs. 133–135.

Ampharete setosa Verrill, 1873, pp. 612, 416.—Hartman, 1944a, p. 20 (52), fig. 8 (figure as *A. grubei*).

Ampharete gracilis Verrill, 1881, pp. 302, 305, 309, 312.—Moore, 1923, p. 20; not *A. gracilis* Malmgren, 1865.

Ampharete finmarchica Verrill, 1881, pp. 298, 305, 309, 312.—Wesenberg-Lund, 1950a, p. 47; 1950b, p. 109; 1953, p. 90.

Ampharete groenlandica Treadwell, 1937, p. 33.

DESCRIPTION: Paleae about 20 in each semicircular group, taper rather abruptly, with short to long acuminate tips. Abdominal setigers 13 (may be 12). Neuropodial cirri inconspicuous.

NEW RECORDS: LABRADOR: Hebron Fjord, 60–65 fms., fine sand, mud, some rock; 1 specimen, Station 10. EAST COAST NORTH AMERICA: Off Maine, Massachusetts, 13–110 fms., U. S. Fish Commission (by Verrill as *A. gracilis*, *A. setosa*, *A. finmarchica*). WEST COAST NORTH AMERICA: Washington Sound, 12 fms., mud, M. H. Pettibone.

DISTRIBUTION: Widely distributed in the Arctic: Siberian and Canadian Arctic, Greenland, Spitsbergen, Barents Sea, Novaya

Zemlya, Kara Sea. Also Shetlands, Norway to Danish waters and Scotland; Hudson Bay to Massachusetts; Bering Sea to southern California; north Japan Sea to Japan. In 2 to 1,062 fathoms.

Genus *Lysippe* Malmgren, 1865

Lysippe labiata Malmgren, 1865

Lysippe labiata Malmgren, 1865, p. 367, pl. 26, fig. 78.—Annenkova, 1937, p. 189; 1938, p. 201.—Gorbunov, 1946, p. 39.—Zatsepin, 1948, p. 151, pl. 37, fig. 17.—Wesenberg-Lund, 1950a, p. 48; 1950b, p. 113; 1951, p. 105; 1953, p. 93.—Berkeley and Berkeley, 1952, p. 67, fig. 138.

DESCRIPTION: Peristomium forms a widely protruding collarlike lobe. Abdominal segments 14 (13–15?). Two short anal cirri. Without paleae (or very small and delicate).

NEW RECORDS: LABRADOR: Hamilton Inlet, Strait of Belle Isle, 8–30 fms., soft mud and mud with stones; 2 specimens, Stations 17, 43. EAST COAST NORTH AMERICA: Bedford Basin, Nova Scotia, 40 fms., U. S. Fish Commission (by Verrill).

DISTRIBUTION: Widely distributed in the Arctic: Siberian Arctic, Greenland, Spitsbergen, Barents Sea, Novaya Zemlya. Also Iceland, Denmark; Labrador to Nova Scotia; Alaska; north Japan Sea. In 1 to 433 fathoms.

Genus *Samytha* Malmgren, 1865

Samytha sexcirrata (Sars, 1856)

Samytha sexcirrata Malmgren, 1865, p. 370, pl. 20, fig. 49.—Verrill, 1881, pp. 298, 305, 309, 312.—Moore, 1909b, p. 140; not 1923, p. 214.—Chamberlin, 1920, p. 23.—Berkeley and Berkeley, 1944, p. 3.—Zatsepin, 1948, p. 151, pl. 37, fig. 19.

DESCRIPTION: Branchiae 6, in transverse row from a common base. Abdominal segments 13. With an anterior ventral collar below the prostomium.

NEW RECORDS: LABRADOR: Strait of Belle Isle, 8 fms., soft mud; 3 specimens, Stations 17. EAST COAST NORTH AMERICA: Off Georges Bank, 110 fms., U. S. Fish Commission (by Verrill).

DISTRIBUTION: Siberian and Alaskan Arctic; Norway; Labrador to Gulf of Maine; Alaska. In 8 to 110 fathoms.

Genus *Sabellides* Milne-Edwards, 1838, emend. Malmgren, 1865

Sabellides borealis Sars, 1856

Sabellides borealis Malmgren, 1865, p. 368, pl. 20, fig. 47.—Moore, 1909b, p. 139.—Gorbunov, 1946, p. 39.—Zatsepin, 1948, p. 151, pl. 37, fig. 15.—Wesenberg-Lund, 1950a, p. 47; 1950b, p. 111; 1951, p. 104; 1953, p. 92.

DESCRIPTION: Paleae very small, rudimentary (smaller than notosetae). Branchiae 8, in two groups. Oral tentacles pinnate. Abdominal segments 12, with neuropodial cirri. Two anal cirri. Tube muddy, gray, compact, smooth.

NEW RECORDS: LABRADOR: Seven Islands Bay, Hebron Fjord, 30–125 fms., on bottoms of mud, stones, and mud with rock; 12 specimens, Stations 11, 12, 31, 41.

DISTRIBUTION: Widely distributed in the Arctic: Siberian Arctic, Greenland, Spitsbergen, Barents Sea, Novaya Zemlya, Kara Sea. Also Iceland, Norway to England; Labrador. In 5 to 153 fathoms.

Family TEREBELLIDAE

Genus *Pista* Malmgren, 1865

Both species have a single pair of branchiae, with large main stem and branched dichotymously. Cephalic ridge with numerous eyespots. Two pairs large lateral lobes on segments 1 and 3 (anterior and posterior to branchial segment).

Key to the species of Pista from Labrador

1. Thoracic setigers 15. Tube of muddy sand in form of 2½ to 3 windings in horizontal plane, flattened oval in cross section . . . . . **P. flexuosa**
   Thoracic setigers 16. Tube cylindrical, membranous, with small pebbles of varying sizes, debris, bryozoans, parts of other worm tubes, algae, etc. **P. maculata**

Pista flexuosa (Grube, 1860)

Terebella flexuosa Grube, 1860, p. 102, pl. 5, fig. 2.
Axione flexuosa Malmgren, 1865, p. 384, p. 24, fig. 68.—Moore, 1909b, p. 141.
Pista flexuosa Hessle, 1917, p. 162.—Annenkova, 1937, p. 191; 1938, p. 205.—Treadwell, 1937, p. 162.—Zatsepin, 1948, p. 155, pl. 38, fig. 10.—Wesenberg-Lund, 1950a, p. 52; 1950b, p. 120; 1953, p. 98.
Scione flexuosa Augener, 1928, p. 790.

Some specimens shared their curved tubes with the polynoid commensals, *Arcteobia anticostiensis*.

NEW RECORDS: LABRADOR: Seven Islands Bay, Hebron Fjord, Nain, Hamilton Inlet, west end Lake Melville, 10–125 fms., on bottoms of mud and mud with stones and rock; 40 specimens, Stations 10–12, 33, 38, 43, 50, 52, 57.

DISTRIBUTION: Widely distributed in the Arctic: Siberian and Canadian Arctic, Greenland, Spitsbergen, Novaya Zemlya, White Sea, Kara Sea. Also Labrador to Newfoundland; Okhotsk Sea to north Japan Sea. In 4 to 211 fathoms.

Pista maculata (Dalyell, 1853)

Pista maculata Wesenberg-Lund, 1953, p. 97.—Pettibone, 1954, p. 323, fig. 36, k, 1.

NEW RECORDS: LABRADOR: Seven Islands Bay, Hebron Fjord, east and west ends Lake Melville, Goose Bay and Terrington Basin of Greater Lake Melville area, 8–125 fms.; on bottoms of mud, and mud with rock; 121 specimens, Stations 11, 12, 14, 31, 38–40, 47, 53, 55, 57, 59, 60, 68.

DISTRIBUTION: Widely distributed in the Arctic. Also Iceland, Norway to English Channel; Hudson Bay to Maine; Bering Sea. In 3 to 1, 528 fathoms.

Genus *Leaena* Malmgren, 1865

Leaena abranchiata Malmgren, 1865

Leaena abranchiata Wesenberg-Lund, 1953, p. 99.—Pettibone, 1954, p. 325, fig. 37, a, b.

Some specimens had tubes of mud with bits of rock and were fastened to tubes of the terebellid *Pista maculata*.

NEW RECORDS: LABRADOR: Seven Islands Bay, west end Lake Melville, 15–55 fms., on bottoms of mud and mud with rock; 21 specimens, Stations 31, 37, 38, 57.

DISTRIBUTION: Widely distributed in the Arctic. Also Iceland, Faroes, Norway, Sweden, Finland; Hudson Bay to Labrador; southwestern Alaska; Okhotsk Sea to north Japan Sea; Antarctic, South Georgia. In 5 to 1,975 fathoms.

Genus *Thelepus* Leuckart, 1849

Thelepus cincinnatus (Fabricius, 1780)

Thelepus cincinnatus Moore, 1909b, p. 141.—Wesenberg-Lund, 1953, p. 100.—Pettibone, 1954, p. 327, fig. 37,d.

NEW RECORDS: LABRADOR: Davis Inlet, Strait of Belle Isle, 12–30 fms., on bottoms of rock, rock and bryozoans, and rubble; 5 specimens, Stations 2, 3, 20.

DISTRIBUTION: Widely distributed in the Arctic. Also Iceland, Norway to Portugal, Mediterranean, Adriatic; Labrador to Massachusetts; Bering Sea to Washington; Japan; Indian Ocean; Antarctic. In low water to 1,391 fathoms.

Genus *Polycirrus* Grube, 1851

Polycirrus medusa Grube, 1855

Poylcirrus medusa Wesenberg-Lund, 1953, p. 102.—Pettibone, 1954, p. 328, fig. 37,e,f.

NEW RECORD: LABRADOR: Kaipokok Inlet, 45 fms., silt; 1 specimen, Station 7.

DISTRIBUTION: Widely distributed in the Arctic. Also Iceland, Swedish west coast to France, Mediterranean; Labrador to Maine; Bering Sea to Washington; Okhotsk Sea to north Japan Sea. In low water to 889 fathoms.

Genus *Terebellides* Sars, 1835

Terebellides stroemii Sars, 1835

Terebellides stroemii Moore, 1909b, p. 142.—Wesenberg-Lund, 1953, p. 105.—Pettibone, 1954, p. 330, fig. 37,j–m.

NEW RECORDS: LABRADOR: Hebron Fjord, Hamilton Inlet, west end Lake Melville, Strait of Belle Isle, 5–65 fms., on bottoms of mud and sandy mud with rock and much detritus; 5 specimens, Stations 10, 17, 23, 38.

DISTRIBUTION: Widely distributed in the Arctic. Also Iceland, Norway to Portugal, Mediterranean, Adriatic, Black Sea; Hudson Bay to Long Island Sound; Gulf of Mexico, West Indies; Bering Sea to southern California, Panamá, Venezuela; north Japan Sea to Japan; Iranian Gulf; Indian Ocean; Antarctic. In low water to 1,611 fathoms.

Family SABELLIDAE

Genus *Sabella* Linné, 1767

Sabella crassicornis Sars, 1851

Sabella crassicornis Pettibone, 1954, p. 334, fig. 38,a–i.
Sabella fabricii Wesenberg-Lund, 1953, p. 106.

NEW RECORD: LABRADOR: Hamilton Inlet, 5–6 fms., sand, mud, rock, much detritus; 1 specimen, Station 23.

DISTRIBUTION: Widely distributed in the Arctic. Also Iceland, Norway to France, Mediterranean; Hudson Bay to Massachusetts; Bering Sea to California, Central America; north Japan Sea to Japan. In low water to 230 fathoms.

Genus *Potamilla* Malmgren, 1865

Potamilla neglecta (Sars, 1851)

Potamilla neglecta Wesenberg-Lund, 1953, p. 107.—Pettibone, 1954, p. 335, fig. 38,j–n.

NEW RECORD: LABRADOR: Hebron Fjord, 125 fms., mud; 1 specimen, Station 12.

DISTRIBUTION: Widely distributed in the Arctic. Also Iceland, Norway to France, Mediterranean, Adriatic, Cape Verde Islands; Labrador to Massachusetts; Bering Sea to California; north Japan Sea to Japan; Antarctic. In low water to 1,044 fathoms.

Genus *Branchiomma* Kölliker, 1858

Tori of thorax with a single row of avicular uncini, without hoelike setae. Branchial filaments with paired dorsal appendages (stylodes) on outer sides of branchial filaments.

Branchiomma infarcta (Kröyer, 1856)

Sabella infarcta Kröyer, 1856, p. 21.

Dasychone infarcta Malmgren, 1865, p. 403, pl. 28, fig. 86.—Augener, 1928, p. 803, pl. 11, fig. 11.—Gustafson, 1936, p. 10.—Berkeley and Berkeley, 1943, p. 130; 1944, p. 5.—Gorbunov, 1946, p. 39.—Zatsepin, 1948, p. 160, pl. 39, fig. 1.—Wesenberg-Lund, 1950a, p. 57; 1950b, p. 130; 1951, p. 121; 1953, p. 107.

Branchiomma infarcta Johansson, 1927, p. 157.

DESCRIPTION: Collarette 4-lobed—2 ventral, 2 laterodorsal. Branchial filaments without eyespots, banded with pink. Tube membranous, free end covered with mud.

NEW RECORDS: LABRADOR: Kaipokok Inlet, Backway, east end, middle, and west end Lake Melville, Goose Bay, 9–80 fms., on bottoms of silt, mud, and sand with mud and rock; 43 specimens, Stations, 7, 28, 32, 35, 39, 40, 47, 59, 60, 63, 67, 79.

DISTRIBUTION: Widely distributed in the Arctic: Siberian and Canadian Arctic, Davis Strait, Greenland, Spitsbergen, Novaya Zemlya, Kara Sea. Also Iceland, Norway, Denmark Strait; Hudson Bay to Labrador; Bering Sea. In low water to 411 fathoms.

Genus *Chone* Kröyer, 1856

Chone dunéri Malmgren, 1867

Chone dunéri Wesenberg-Lund, 1953, p. 109.—Pettibone, 1954, p. 339, fig. 39,k,l.

NEW RECORD: LABRADOR: Strait of Belle Isle, 8 fms., soft mud; 2 specimens, Station 17.

DISTRIBUTION: Widely distributed in the Arctic. Also Iceland, Norway to North Sea, Madeira, Mediterranean, Adriatic; Labrador; Florida; Perú. In 8 to 889 fathoms.

Genus *Euchone* Malmgren, 1865

Large ventral groovelike depression with flared sides on posterior segments. Collarette 2-lobed, with small midventral slit.

Key to the species of Euchone from Labrador

1. Collarette obliquely slanted, longer ventrally. Branchial filaments end in long slender tips. Abdominal region with 2 pairs small ventral shields per segment . . . . . **E. papillosa**

   Collarette nearly straight. Branchial filaments end in short limbate tips. Abdominal region with one pair large ventral shields per segment . **E. analis**

Euchone analis (Kröyer, 1856)

Euchone analis Wesenberg-Lund, 1953, p. 110.—Pettibone, 1954, p. 339, fig. 39,m,n.

New record: Labrador: Seven Islands Bay, 30 fms., mud, some rock; 4 specimens, Station 31.

Distribution: Widely distributed in the Arctic. Also Iceland, Norway to Danish waters; Hudson Bay to Labrador; Bering Sea to British Columbia; north Japan Sea. In 2 to 389 fathoms.

Euchone papillosa (Sars, 1850)

Euchone papillosa Malmgren, 1865, p. 407, pl. 29, fig. 94.—Augener, 1928, p. 805.—Gustafson, 1936, p. 10.—Annenkova, 1937, p. 196; 1938, p. 215.—Gorbunov. 1946, p. 39.—Zatsepin, 1948, p. 163, pl. 39, fig. 11.—Wesenberg-Lund, 1950a, p. 59; 1950b, p. 132; 1951, p. 124; 1953, p. 111.

Euchone tuberculosa Malmgren, 1865, p. 407, pl. 29, fig. 92.—Moore, 1909b, p. 145.

Description: Collarette notched midventrally. Tube thin, elongated, of silty mud, smooth, tough.

New records: Labrador: Hebron Fjord, 95–125 fms., mud; 14 specimens, Stations 11, 12. East Coast North America: Bay of Fundy, U. S. Fish Commission (by Verrill as *E. tuberculosa*). West Coast North America: *Albatross* Station 2848, Unalaska to Cook Island, 55°10′ N., 160°18′ W., 110 fms., 1888; *Albatross* Station 3311, Bering Sea, 53°59′ N., 166°29′ W., 85 fms., 1890.

Distribution: Widely distributed in the Arctic: Siberian Arctic, Greenland, Spitsbergen, Novaya Zemlya, Kara Sea, Laptev Sea. Also Iceland, Norway to Danish waters; Labrador to Bay of Fundy; Bering Sea; north Japan Sea. In 2 to 1,611 fathoms.

Family Serpulidae

Genus *Spirorbis* Daudin, 1800

Spirorbis (*Laeospira*) *granulatus* (Linné, 1767)

Spirorbis (*Laeospira*) *granulatus* Wesenberg-Lund, 1952, p. 12; 1953, p. 117.—Pettibone, 1954, p. 343, fig. 39, r-t.

New records: Labrador: Seven Islands Bay, east end Lake Melville, 30–35 fms., on bottoms of mud and mud with rock, on brachiopod shell; 2 specimens, Stations 31, 34.

Distribution: Widely distributed in the Arctic. Also Iceland, Norway to France; Hudson Bay to North Carolina; Alaska to British Columbia; north Japan Sea. In low water to 239 fathoms.

***Spirorbis (Dexiospira) spirillum* (Linné, 1758)**

Spirorbis (*Dexiospira*) *spirillum* Moore, 1909b, p. 145.—Wesenberg-Lund, 1952, p. 9; 1953, p. 116.—Pettibone, 1954, p. 344, fig. 39,u–x.

New records: Labrador: Seven Islands Bay, Nain, Hamilton Inlet, Backway, Greater Lake Melville area, Strait of Belle Isle, 10–40 fms., on bottoms of stones, rocks, mud, on bryozoans, algae (spiny type and *Laminaria*), on sabellid worm tube; 52 specimens, Stations 1, 30, 31, 52, 66, 67.

Distribution: Widely distributed in the Arctic. Also Iceland, Norway to France; Hudson Bay to Long Island Sound, southern Texas; Bering Sea to México; north Japan Sea to Japan. In low water to 305 fathoms.

References

Alaejos y Sanz, Luís.
1905. Estudio descriptivo de algunas especies de polinoinos de las costas de Santander. Mem. Soc. Española Hist. Nat., vol. 3, pp. 1–76, 12 pls.

Annenkova, N. P.
1931. Die Polychaeten in den Sammlungen der Jakutischen Expedition der Akademie der Wissenschaften der U. S. S. R. Zool. Anz., vol. 95, pp. 203–205, 4 figs.
1937. The polychaete fauna of the northern part of the Japan Sea. Issled. Morei USSR, Gosud. Gidrol. Inst., Leningrad, fasc. 23, pp. 139–216, 12 figs., 5 pls.
1938. Polychaeta of the North Japan Sea and their horizontal and vertical distribution. *In* Reports of the Japan Sea Hydrobiological Expedition of the Academy of Sciences of the USSR in 1934, pt. 1, pp. 81–230, 16 figs.

Augener, Hermann
1928. Die Polychäten von Spitzbergen. *In* Fauna Arctica. Römer und Schaudinn, vol. 5, pt. 3, pp. 649–834, pl. 11.
1933. Polychaeten aus den zoologischen Museen von Leiden und Amsterdam. Pt. I. Zool. Meded. Leiden, vol. 15, pp. 177–260, 7 figs.

Bergström, Erik
1914. Zur Systematik der Polychaetenfamilie der Phyllodociden. Zool. Bidr. Uppsala, vol. 3, pp. 37–224, 81 figs., pls. 1–5.

Berkeley, Edith, and Berkeley, Cyril
1942. North Pacific Polychaeta, chiefly from the west coast of Vancouver Island, Alaska, and Bering Sea. Canadian Journ. Res., vol. 20, pp. 183–208, 6 figs.
1943. Biological and oceanographical conditions in Hudson Bay. II Polychaeta from Hudson Bay. Journ. Fish. Res. Board of Canada, vol. 6, No. 2, pp. 129–132.
1944. Polychaeta from the western Canadian Arctic region. Canadian Journ. Res., vol. 22, pp. 1–5, 6 figs.

1948. Annelida, Polychaeta Errantia. *In* Canadian Pacific Fauna. Fish. Res. Board Canada, No. 9b (1), pp. 1–100, 160 figs.

1952. Annelida, Polychaeta Sedentaria. *In* Canadian Pacific Fauna. Fish. Res. Board Canada, No. 9b (2), pp. 1–139, 292 figs.

1954. Additions to the polychaete fauna of Canada, with comments on some older records. Journ. Fish. Res. Board Canada, vol. 11, No. 4, pp. 454–471, 16 figs.

CHAMBERLIN, RALPH V.

1920. The polychaetes collected by the Canadian Arctic Expedition, 1913–18. Rep. Canadian Arctic Exped. 1913–18, pt. B, vol. 9, pp. 1–41, 6 pls.

DITLEVSEN, HJALMAR

1917. Annelids. I. *In* The Danish *Ingolf*-Expedition, vol. 4, pt. 4, pp. 1–71, 24 figs., 6 pls.

ELIASON, ANDERS

1920. Biologisch-Faunistische Untersuchungen aus dem Öresund. V. Polychaeta. Acta Univ. Lundensis, new ser., vol. 16, pt. 6, pp. 1–103, 18 figs.

ESSENBERG, CHRISTINE

1917. Description of some new species of Polynoidae from the coast of California. Univ. California Publ. Zool., vol. 18, No. 3, pp. 45–60, pls. 2–3.

FABRICIUS, OTTO

1780. Fauna groenlandica . . . . Pp. 1–452, 12 figs.

FAUVEL, PIERRE

1923. Polychètes errantes. Faune de France, vol. 5, pp. 1–488, 181 figs.

1927. Polychètes sédentaires. Faune de France, vol. 16, pp. 1–494, 152 figs.

1933. Annélides polychètes du Golfe du Pei Tcheu Ly. Publ. Mus. Hoang ho Pai ho de Tien Tsin, No. 15, pp. 1–67, 6 figs.

FRIEDRICH, HERMANN

1939. Polychaeten-Studien. IV. Zur Polychaeten fauna der Barents-See. Kieler Meeresf., vol. 3, pt. 1, pp. 122–132, 6 figs.

GORBUNOV, G. P.

1946. Bottom life of the Novosiberian shoalwaters and the central part of the Arctic ocean. Trudy Dreifuŝshchei ekspeditsii Glavsevmorputi na ledokolnom parokhode *G. Sedov* 1937–1940, vol. 3, pp. 30–138, 1 pl. (Leningrad Vsesoŝuznyĭ arkticheskiĭ institut).

GRUBE, ADOLPH EDUARD

1860. Beschreibung neuer oder wenig bekannter Anneliden. Arch. Naturg., vol. 26, pt. 1, pp. 71–118, pls. 3–5.

GUSTAFSON, GUNNAR

1936. Polychaeta and Sipunculoidea from the Siberian Arctic Ocean. *In* The Norwegian North Polar expedition with the *Maud*, 1918–1925, Scientific results, vol. 5, No. 17, pp. 1–12.

HANSEN, G. ARMAUER

1882. Anneliden fra den Norske Nordhavs-Expedition, 1876–1878. Den Norske Nordhavs-Exped., pt. 7, pp. 1–53, 7 pls.

HARTMAN, OLGA

1938. Descriptions of new species and new generic records of polychaetous annelids from California of the families Glyceridae, Eunicidae, Stauronereidae, and Opheliidae. Univ. California Publ. Zool., vol. 43, No. 6, pp. 93–112, 63 figs.

1942a. A review of the types of polychaetous annelids at the Peabody Museum of Natural History, Yale University. Bull. Bingham Oceanogr. Coll., vol. 8, pt. 1, pp. 1–98, 161 figs.

1942b. The identity of some marine annelid worms in the United States National Museum. Proc. U. S. Nat. Mus., vol. 92, No. 3142, pp. 101–140, figs. 8–15.

1944a. New England Annelida. Pt. 2, including the unpublished plates by Verrill with reconstructed captions. Bull. Amer. Mus. Nat. Hist., vol. 82, No. 7, pp. 327–344, pls. 13–35 [45–60].

1944b. Polychaetous annelids. Pt. V. Eunicea. Allan Hancock Pacific Exped., vol. 10, No. 1, pp. 1–236, pls. 1–18.

1944c. Polychaetous annelids. Allan Hancock Atlantic Exped., Rep. No. 3, pp. 1–32, 2 pls.

1945. The marine annelids of North Carolina. Bull. Duke Univ. Marine Sta., No. 2, pp. 1–51, 10 pls.

1948. The polychaetous annelids of Alaska. Pacific Sci., Univ. Hawaii, vol. 2, No. 1, pp. 3–58, 12 figs.

1950. Goniadidae, Glyceridae and Nephtyidae. Allan Hancock Pacific Exped., vol. 15, No. 1, pp. 1–180, 19 pls., 3 figs.

Hartman, Olga, and Reish, Donald J.

1950. The marine annelids of Oregon. Oregon State Monogr. Studies in Zool., No. 6, pp. 1–64, 5 pls.

Hessle, Christian

1917. Zur Kenntnis der Terebellomorphen Polychaeten. Zool. Bidr. Uppsala, vol. 5, pp. 39–258, 66 figs., pls. 1–5.

Johansson, Karl Erik

1927. Beiträge zur Kenntnis der Polychaeten Familien Hermellidae, Sabellidae und Serpulidae. Zool. Bidr. Uppsala, vol. 11, pp. 1–184, 15 figs., 5 pls.

Johnson, Herbert Parlin

1901. The Polychaeta of the Puget Sound region. Proc. Boston Soc. Nat. Hist., vol. 29, No. 18, pp. 381–437, 19 pls.

Johnston, George

1839. The British Aphroditacea. Ann. Mag. Nat. Hist., vol. 2, pp. 424–441, pls. 21–23.

Kröyer, Henrik

1856. Meddelelser om ormeslaegten *Sabella* Linn., isaer dans nordiske Arter. Overs. Danske Videnskab. Selsk. Forh. (1856), pp. 1–36.

McIntosh, William C.

1900. A monograph of the British annelids. II. Polychaeta. Amphinomidae to Sigalionidae. Vol. 1, pp. 215–442, pls. 24–42.

Malmgren, Anders J.

1865. Nordiska Hafs-Annulater. Förh. Öfv. Kongl. Vet. Akad. Stockholm. Nos. 1, 2, 5, pp. 51–110, 181–192, 355–410, pls. 8–15, 18–29.

1867. Annulata Polychaeta Spetsbergiae, Groenlandiae, Islandiae et Scandinaviae hactenus cognita. Pp. 1–127, 14 pls.

Monro, C. C. A.

1939. Polychaeta of the *Rosaura* Expedition. Nov. Zool. London, vol. 41, pp. 345–354, 4 figs.

Moore, J. Percy

1902. Descriptions of some new Polynoidae with a list of other Polychaeta from North Greenland waters (and Alaska). Proc. Acad. Nat. Sci. Philadelphia, vol. 54, pp. 258–278, pls. 13–14.

1908. Some polychaetous annelids of the northern Pacific coast of North America. Proc. Acad. Nat. Sci. Philadelphia, vol. 60, pp. 321–364, 4 figs.

1909a. The polychaetous annelids dredged by the U. S. S. *Albatross* off the coast of southern California in 1904. I. Syllidae, Sphaerodoridae, Hesionidae and Phyllodocidae. Proc. Acad. Nat. Sci. Philadelphia, vol. 61, pp. 321–351, pls. 15–16.

1909b. The polychaetous annelids dredged in 1908 by Mr. Owen Bryant off the coasts of Labrador, Newfoundland, and Nova Scotia. Proc. U. S. Nat. Mus., vol. 37, No. 1703, pp. 133–146.

1910. The polychaetous annelids dredged by the U. S. S. *Albatross* off the coast of southern California in 1904. II. Polynoidae, Aphroditidae and Segaleonidae. Proc. Acad. Nat. Sci. Philadelphia, vol. 62, pp. 328–402, pls. 28–33.

1923. The polychaetous annelids dredged by the U. S. S. *Albatross* off the coast of southern California in 1904. IV. Spionidae to Sabellariidae. Proc. Acad. Nat. Sci. Philadelphia, vol. 75 (Append.), pp. 179–259.

MÜLLER, OTTO FREDERICH

1776. Zoologiae Danicae prodromus, seu animalium Daniae et Norvegiae . . ., pp. 1–274.

MURDOCH, JOHN

1885. Natural history of Alaska. Vermes. *In* Report of the International Polar Expedition to Point Barrow, Alaska, pt. 4, pp. 152–156.

NUTT, DAVID C.

1953. Certain aspects of oceanography in the coastal waters of Labrador. Journ. Fish. Res. Board Canada, vol. 10, No. 4, pp. 177–186, 4 figs.

OERSTED, ANDERS S.

1843. Groenlands Annulata Dorsibranchiata. K. Danske Videns. Selsk. Naturv. Math., vol. 10, pp. 155–216, 8 pls.

OKUDA, SHIRO

1937. Annelida Polychaeta in Onagawa Bay and its vicinity. I. Polychaeta Sedentaria. Sci. Rep. Tôhoku Univ., ser. 4, vol. 12, No. 1, pp. 45–69, 12 figs., pl. 2.

PETTIBONE, MARIAN H.

1954. Marine polychaete worms from Point Barrow, Alaska, with additional records from the North Atlantic and North Pacific. Proc. U. S. Nat. Mus., vol. 103, No. 3324, pp. 203–356, figs. 26–39.

RATHKE, HEINRICH

1843. Beiträge zur Fauna Norwegens. Nova Acta Acad. Leop. Carol., vol. 20, No. 1, pp. 1–264, 12 pls.

RIOJA, ENRIQUE

1941. Estudios annelidológicos. III. Datos para el conocimiento de las fauna de poliquetos de las costas del Pacífico de México. Anal. Inst. Biol. México, vol. 12, No. 2, pp. 669–746, 9 pls.

SARS, MICHAEL

1835. Beskrivelser og iagttagelser over nogle moekelige eller nye i havet ved den Bergenske kyst levende dyr. . . . Pp. 1–81, 15 pls.

1851. Beretning om en i Sommeren 1849 foretagen zoologisk Reise i Lofoten og Finmarken. 5. Annelider. Nyt. Mag. Naturv., vol. 6, pp. 196–211.

Southern, Rowland
1914. Archiannelida and Polychaeta. *In* Clare Island survey, pt. 47. Proc. Roy. Irish Acad. Dublin, vol. 31, pp. 1–160, 15 pls.
Stimpson, William
1854. Synopsis of the marine Invertebrata of Grand Manan. Smithsonian Contr. Knowl., vol. 6, pp. 1–66, 3 pls.
Støp-Bowitz, C.
1946a. Les scalibregmiens de Norvège. Nyt. Mag. Naturv., vol. 85, pp. 63–87, 2 pls., 6 figs.
1946b. Les ophéliens Norvégiens. Nyt. Mag. Naturv., vol. 85, pp. 21–61, 3 pls., 5 figs.
1948a. Les flabelligériens Norvégiens. Bergens Mus. Åarb. 1946/47, Naturv., No. 2, pp. 1–59, 13 figs., 12 pls.
1948b. Sur les polychètes arctiques des families des glycériens, des ophéliens, des scalibregmiens et des flabelligériens. Tromsø Mus. Aarsh., vol. 66, No. 2, pp. 1–58, 18 figs.
Sumner, F. B., Osburn, R. C., and Cole, L. J.
1913. Annulata. *In* A biological survey of the waters of the Woods Hole and vicinity. Bull. U. S. Bur. Fish., vol. 31, pt. 2, pp. 615–636.
Tebble, Norman
1952. On three species of the genus *Ophelia* (Polychaeta) from British and adjacent waters. Ann. Mag. Nat. Hist., ser. 12, vol. 5, pp. 553–571, 5 figs.
1953. A review of the genus *Ophelia* (Polychaeta) with descriptions of new species from South African and Californian waters. Ann. Mag. Nat. Hist., ser. 12, vol. 6, pp. 361–368, 1 fig.
Théel, Johan H.
1879. Les annélides polychètes des mers de la Nouvelle-Zemble. Svenska Vetensk. Akad. Handl., vol. 16, pt. 3, pp. 1–75, 4 pls.
Thorson, Gunnar
1946. Reproduction and larval development of Danish marine bottom invertebrates. Medd. Komm. Havundersøg. Kjøbenhavn, vol. 4, No. 1, pp. 1–523, 198 figs.
Treadwell, A. L.
1937. Polychaetous annelids collected by Captain Robert A. Bartlett in Greenland, Fox Basin, and Labrador. Journ. Washington Acad. Sci., vol. 27, No. 1, pp. 23–36, 16 figs.
Verrill, Addison Emory
1873. Report upon the invertebrate animals of Vineyard Sound and the adjacent waters, with an account of the physical characters of the region. Rep. U. S. Fish Comm. for 1871–72, pp. 295–778.
1879. Notice of recent additions to the marine invertebrata of the northeastern coast of America, with descriptions of new genera and species and critical remarks on others. Proc. U. S. Nat. Mus., vol. 2, pp. 165–206.
1881. New England Annelida. Pt. I. Historical sketch, with annotated lists of the species hitherto recorded. Trans. Connecticut Acad. Arts Sci., vol. 4, pt. 2, pp. 285–324, pls. 3–12.
Webster, H. E.
1886. The Annelida Chaetopoda of New Jersey. Rep. New York State Mus., vol. 39, pp. 128–159, pls. 4–10.

WEBSTER, H. E., and BENEDICT, J. E.

1884. The Annelida Chaetopoda from Provincetown and Wellfleet, Massachusetts. Rep. U. S. Fish Comm. for 1881, pp. 699–747, 8 pls.

1887. The Annelida Chaetopoda from Eastport, Maine. Rep. U. S. Fish Comm. for 1885, pp. 707–755, 8 pls.

WESENBERG-LUND, ELISE

1949. Polychaetes of the Iranian Gulf. Danish Sci. Invest. Iran, pt. 4, pp. 247–400, 47 figs.

1950a. Polychaeta. *In* The Danish *Ingolf*-Expedition, vol. 4, No. 14, pp. 1–92, 10 pls., 67 charts, 2 figs.

1950b. The Polychaeta of west Greenland. . . . Medd. Grønland, vol. 151, No. 2, pp. 1–171, 37 charts, 4 tables.

1951. Polychaeta. *In* The Zoology of Iceland, vol. 2, pt. 19, pp. 1–182, 12 figs., 62 charts.

1952. Serpulidae (Polychaeta) collected by C. Dons along the Norwegian coast. Norske Vidensk. Selsk. Skr., vol. 25, No. 6, pp. 1–22, 3 figs.

1953. The zoology of east Greenland. Polychaeta. Medd. Grønland, vol. 122, No. 3, pp. 1–169, 4 figs., 27 charts, 5 tables.

WIRÉN, AXEL

1883. Chaetopoder från Sibiriska Ishafvet och Berings Haf insamlade under *Vega*-Expeditionen 1878–1879. *In*, *Vega*-Exped. vetenskapliga Iakttagelser. . . . af A. E. Nordenskiöld, vol. 2, pp. 383–428, pls. 27–32.

ZATSEPIN, V.

1948. Klass Polychaeta. *In* Opredelitel fauny i flory severnykh morei USSR, N. S. Gaevskaia-Sokolova, pp. 94–167, figs. 18–22, pls. 28–39.

U. S. GOVERNMENT PRINTING OFFICE: 1956